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A Critical Realist Analysis of the Legitimising Affects of the Entrepreneurial University

Lee Wells

A dissertation submitted to the University of Bristol in accordance with the
requirements for award of the degree of Doctor of Education (EdD) in the Faculty
of Social Sciences and Law

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Abstract

Despite the expansive literature on the Entrepreneurial University, very little has been written regarding the impact of university entrepreneurialism on the legitimacy of the university. This study hopes to address this shortcoming by conducting a detailed analysis of newspaper articles, taken to represent a proxy of public opinion (Baum, 1995). Grounded in the findings of this analysis the study will present a conceptual framework describing the antecedents of university legitimacy within an entrepreneurially driven university sector.

The study is grounded in a critical realist philosophy and therefore accepts that outcomes, seen and unseen, experienced or not in the real world are determined by structures and mechanisms laden in hegemony and on culturally contingent interpretations of the social world (Bourdieu et al., 1991). Nevertheless, these structures, seen or unseen, remain very real in an ontological sense as they cause people to act, to invoke experience and to search for understanding.

The current literature on the entrepreneurial university lacks a clear consensus on definition, preferring to identify shared characteristics (Yusof and Jain, 2010) and provides limited systematic examination of the barriers and enablers to entrepreneurialism (Kirby et al., 2011). The literature is often case study based and descriptive (Sotiris, 2012) with limited causal depth (Stam, 2015). This study hopes to overcome these limitations by utilising an innovative research methodology that integrates a grounded theory approach within a critical realist three-domain model of reality (Fleetwood, 2004) to explore the complex relationships and causal affects between entrepreneurial endeavour and university legitimacy.

The study ultimately finds that the current preference for analysing the entrepreneurial university as an egocentric entity within a complex, open system may only partly reveal the multifaceted interrelationships between the university and its environment, thereby limiting causal inference. By addressing this concern, the study hopes to provide recommendations that extend both current theoretic and applied professional knowledge in relation to the entrepreneurial university and its legitimacy.

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Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's Regulations and Code of Practice for Research Degree Programmes and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

SIGNED:Lee Wells..... DATE:1 December 2019.....

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List of Abbreviations

CSR	Corporate Social Responsibility
EUL	Entrepreneurial University Legitimacy
IPR	Intellectual Property Rights
HEPI	Higher Education Policy Institute
LSE	London School of Economics
MIT	Massachusetts Institute of Technology
NDA	Non Disclosure Agreement
NIE	New Institutional Economics
NPM	New Public Management
NRS	National Readership Survey
OfS	Office for Students
PBRF	Performance-Based Research Funding
STaR	Skills Training and Review
STEM	Science Technology Engineering Maths
VC	Vice Chancellor

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Important Note on Citations

Please note all academic literature citations within this dissertation are formatted using the Harvard referencing standard. However, the study makes extensive use of newspaper articles as its primary data source (see chapter 3, section 3.5.1). In order to differentiate this data from the academic literature, newspaper articles will be cited utilising a numbered notation detailing publication source and the full date of publication, rather than Harvard notation of author/year. An example of an in-text citation for a newspaper article would be:

A dog was reunited with its owners after being lost for five days. (The Guardian, 12/1/2016) ²⁰⁴

The reference list for all newspaper articles will be formatted as Harvard references, but will be number ordered, rather than alphabetically listed by author name.

This approach been adopted because of the unusually large number of newspaper articles cited in the study and to enable the reader to easily distinguish the data being analysed from any academic literature supporting the analysis.

1 Introduction

1.1 Research Context: Legitimacy and the Entrepreneurial University

In some respects higher education in the UK has been transformed in the last 25 years, in other aspects, little has changed.

The general acceptance of neo-liberal ideals has created a market-led university sector, turning higher education into a commodity where the student is the consumer (Willmott, 1995). Greater emphasis has been placed on the privatisation of university services (DiMartino and Scott, 2012) and encouraging de-regulation to stimulate university market activity (Hemsley-Brown and Oplatka, 2010). University expansion has increased student participation with 50% of young adult school leavers choosing to become undergraduates. Positively, this expansion has been motivated not only by economic needs but also by the emerging needs of the knowledge economy (Leadbetter, 1999, Lucas, 1988) and the political imperative for social mobility in the developed world (Marginson, 2011). It has however, led to the re-structuring of higher education funding, including the imposition of student fees (West et al., 2015). Globalisation has seen the increase in the internationalisation of higher education influenced by intergovernmental institutions and cross border forms of governance including new ways of assessing the university, such as global performance league tables (King, 2009). This triumvirate of marketisation, expansion and globalisation has been underpinned by the imposition of a university management philosophy focused on performance measurement, financial effectiveness and organisational restructuring (Deem et al., 2007).

But the university is still a university. Students, academics, three-year undergraduate courses, research papers, degrees, lecture halls, tutorials, post-grads, Vice-Chancellors, graduation ceremonies. Still the same university, albeit with an entrepreneurial bent.

So what is this entrepreneurial bent? Academic literature concerning the 'Entrepreneurial University' is very broad. It explores many aspects of the university, from operational management to its role in society. Amongst the topics analysed, the literature has attempted to explore: the transformation of universities into entrepreneurial organisations (Clark, 1998a, Kirby, 2006); the student perspective, entrepreneurial education and courses (Volkman, 2004,

Kitagawa et al., 2015); the process of technology transfer from university to industry (Siegel et al., 2003, Etzkowitz, 2014); the academic and faculty viewpoint (Engle et al., 2010, D'este and Perkmann, 2011); the impact entrepreneurial universities have on economic development (Trippel et al., 2015, Smith and Bagchi-Sen, 2012); and the different configurations universities adopt in embracing entrepreneurialism (Bronstein and Reihlen, 2014, Rothaermel et al., 2007, Trippel et al., 2015). However, an area that receives little academic attention is the legitimacy of the entrepreneurial university. In its simplest terms, entrepreneurial university legitimacy is the "degree of cultural support" (Meyer, 1983: 201) the university receives from society at large. It is the public's rationalised acceptance that the institution should exist, functions correctly and operates within an agreeable jurisdiction.

Normative questions regarding entrepreneurialism within universities tend to focus on the capitalisation effect of turning university outcomes (teaching, research) into commodities that can be priced and traded. Bok (2009: 16) argues: "commercially orientated activities will come to overshadow other intellectual values and that university programs will be judged primarily by the money they bring in and not by their intrinsic intellectual quality" before highlighting the risks of such an approach "compromising academic values" (ibid., 155). Thus raising questions regarding academic integrity, but no specific reference as to whether the university remains legitimate. Washburn (2008) argues that the profit motive is becoming a dominant societal value overriding the pursuit of knowledge, social justice and public purpose that risks corrupting the modern university if left unregulated. Yet still no consideration of the changing nature of legitimacy. Slaughter et al. describe how academic capitalism has squeezed the concept of the university as a public good recognising that this "learning regime may undermine public support for higher education" (2004: 29) but then proceed to detail its influence on internal university capability and relationships, under-theorising external implications and the impact on public opinion.

Capitalism, the university and university legitimacy, remain relatively unexplored.

1.2 Key Issues and Research Questions

This doctoral research study will therefore attempt to identify what constitutes legitimacy for a university driven by market-led imperatives and how this legitimacy is shaped by the changes and actions both within the university and across society. At the heart of the study lies a simple research question:

“How does an increasingly market-led university sector affect the legitimacy of the university?”

Additionally, a series of secondary questions will help shape and guide the study:

- What is an entrepreneurial university?
- Is a market led university, entrepreneurial by nature?
- What makes the institution of the university legitimate?
- What factors shape an entrepreneurial university’s legitimacy?
- Is increased entrepreneurialism within the university sector a strategic choice or a response to political and/or global forces?
- Can university governance and management influence legitimacy?
- Is there a conflict between academic and entrepreneurial values?
- What are the social expectations of the modern university?
- What can universities do to remain legitimate?

This final question is important as it sets the tone for the investigation. This research study will look to advance academic theory related to the entrepreneurial university, but it also aims to contribute to practice. How can professional practitioners (university management, policy makers, academics) protect or even enhance the legitimacy of a university (or university sector) driven by market imperatives?

Throughout this dissertation the terms ‘market-led’ and ‘marketisation’ will be used interchangeably, with both referring to the increasing inclination of the university to prioritise commercial opportunity and economic imperative above socially focused outcomes.

1.3 The Objectives and Originality of the Research

The originality of the research is addressed by the need to theorise the relatively unexplored relationship between the entrepreneurial university and legitimacy. Current research on the entrepreneurial university is overly reliant on observational case study analysis producing research that is predominately descriptive and poorly theorised (Kott et al., 2015). It is widely

recognised that entrepreneurial university research lacks a robust theoretical framework (Guerrero and Urbano, 2012).

This doctoral research study is significant for two reasons. Firstly, the study will utilise an innovative approach to investigation, combining grounded theory methodology with critical realist philosophy. This will enable, not only the discovery of those components that make the university legitimate, but also the identification of the complex relationships between entrepreneurial endeavour and legitimacy that have causal affects. Such causal affects may remain hidden by adopting grounded theory method alone.

The innovative methodology provides the basis for the study's second significant contribution. The research will advance existing entrepreneurial university theory by creating a *conceptual framework* grounded in data capable of being analysed in such a way to delineate ontological and epistemic assumptions. In doing so, the analysis will attempt to go beyond the descriptive analysis common to entrepreneurial university literature (Stam, 2015) and provide detailed causal explanation for the phenomena observed and experienced.

In addition to utilising grounded theory methodology and being underpinned by a critical realist philosophy, the study will leverage Mark Suchman's (1995) theoretical model for managing legitimacy (see chapter 2). This will act as a foundation stone of the study, an analytical constant providing a definition of legitimacy and all its dimensions. The study will not challenge or revise this interpretation of legitimacy.

By addressing the need to theorise the relationship between the entrepreneurial university and its external environment, the study will provide a practical application for university management and policy makers, supporting the development of strategies capable of building university legitimacy.

In sum, the research study has three primary objectives:

- 1) The research will seek to develop new theory in the form of a conceptual framework linking university legitimacy and entrepreneurial action.
- 2) The research will extend grounded theory methodology through an additional analytical step that aligns emerging theoretical concepts against a critical realist layered model comprising domains of the empirical, actual and real.

- 3) The research will be applied in focus, providing a tool for practitioners to understand how entrepreneurialism impacts legitimacy.

Overall, the objective of this study is not the search for truth. The research does not expect to identify scientific rules that determine legitimacy. Its aim is to reflect reality, not certainty, providing something practical, something of use.

1.4 Dissertation Structure

In addition to the introduction, the dissertation comprises five chapters: a literature review; methodology; analysis and findings; discussion; and finally, conclusions and recommendations.

Chapter Two, the literature review, firstly describes the concept of legitimacy utilising the work of Suchman (1995). It then details the historic relationship between the university and legitimacy, encompassing nation state and economic imperatives. The emergence of the entrepreneurial university is then described, including a summary of common definitions and a critique of existing theoretic frameworks.

Chapter Three provides an overview of the methodology utilised by the research study. Predominantly based on grounded theory (Glaser and Strauss, 1967) the study will look *initially* to build theory from data. The data will be sourced from newspaper and media articles discussing the entrepreneurial university and legitimacy. Such data was deemed appropriate because legitimacy is a socially located concept that represents the opinion of society. The justification for the use of newspaper media as data is detailed. Data analysis will also make use of academic literature to develop emerging theoretical concepts. The methodology chapter will also explain why the innovative inclusion of a critical realist model of reality, will bring theoretical robustness.

Chapter Four details the analysis and findings of the research. As the research study is based on grounded theory methodology, processes of data collection, data analysis, theory generation and write-up ran concurrently and iteratively: “data collection should be guided by theoretical developments that emerge in the analysis of previously collected data” (Punch, 2013: 134). This chapter provides firstly, working examples of the analysis process in action, before documenting in detail the research findings, which comprised eight theoretic categories. Each theoretical

category is aligned against a critical realist model comprising domains of the empirical, actual and real (Fleetwood, 2005).

Chapter Five presents a discussion of the key findings of the previous chapter. A conceptual framework is presented showing the relationship between: the entrepreneurial university, the environment and legitimacy. Finally, a short personal reflection from the researcher is presented supporting the validity of the study and its applicability for practice.

The sixth and final chapter presents the overall conclusions of the study, considering specifically some practical and applied examples. Finally, a brief ethics statement is made, followed by a description of the study's limitations and recommendations for future research.

2 Literature Review

2.1 The Concept of Legitimacy

This research study will utilise a definition and understanding of legitimacy grounded in Corporate Social Responsibility (CSR) literature [see (Carroll, 2007) for an overview]. The rationale for locating legitimacy within a CSR context was to emphasise the corporate inclination, both in terms of internal operation and public perception, of the entrepreneurial university. Under this context, as argued by Frederick (1998) the corporation (or the university) is compelled to act in a socially responsible manner because the interaction of business and social values are integral to the functioning of free-market enterprise (e.g. a market-led university sector). Business (or the university) must adhere to the values of society. Legitimacy is only conferred when both compliance with normative rules and societal expectations are met (Deephouse and Carter, 2005).

As the priorities and values of society change over time universities face the challenge of recognising and adapting to shifting public expectations in order to maintain their legitimacy. The early literature on organisational legitimacy suggested two approaches for maintaining legitimacy: the institutional approach and strategic approach.

The institutional approach to legitimacy views the organisation as a reflective entity, whose internal practices, culture and structure adapt naturally to the dynamic expectations of society in order to maintain its legitimacy (DiMaggio and Powell, 1983). Adaption is a continuous, often sub-conscious process, where the agency of the organisation to resist internal change is minimal (Oliver, 1991).

The strategic approach to legitimacy assumes public perception is comprised of multiple transient view points that can be influenced through an organisation's communication and action (Pfeffer, 1981). The organisation has the capability to manage and directly influence legitimacy in alignment with its commercial needs. Legitimacy becomes an instrumental tool, extracted from the social environment, to achieve business objectives (Ashforth and Gibbs, 1990).

Consequently, there is a risk that the concept of legitimacy becomes tied to the philosophical positions of structure (institutional approach) and agency (strategic approach), and thereby fail

to account for changes in the environmental context where globalisation has weakened national regulatory frameworks and “political control is increasingly being replaced by economic steering mechanisms” (Schneider and Regulation, 2010: 2). Castelló and Lozano (2011) argue this will reduce the importance of national cultural identity (impacting the institutional approach) in favour of an individualistic perspective that will increase stakeholder power (decreasing the influence of the organisation’s strategic approach).

In an attempt to overcome the limitations of the institutional and strategic approaches Suchman (1995: 574) defined legitimacy as “a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions”. He argued that legitimacy is based on the behavioural dynamic between different stakeholder groups that can take three forms: pragmatic legitimacy; moral legitimacy; and cognitive legitimacy (Suchman, 1995).

Pragmatic legitimacy is driven by the self-interest of an organisation’s most immediate stakeholders. Legitimacy will be gained if stakeholders believe they will profit from the activities of the organisation. The critical task for the organisation is to convince the stakeholder of the benefit of collaboration, often through rhetoric (Castelló and Lozano, 2011). Pragmatic legitimacy can be broken down into three sub-forms of legitimacy: exchange legitimacy (receiving something in return for granting legitimacy); influence legitimacy (shared interests that generate mutual benefit); and thirdly, dispositional legitimacy (a personified organisational view treating the organisation as an individual with whom one can empathise: “they are like me, therefore they are legitimate”).

Cognitive legitimacy arises when society accepts the organisation as inevitable, adopting assumptions that necessitate the operational mechanisms, values and outcomes of the organisation. The organisation is rationalised as the natural means to achieve certain societal goals. Cognitive legitimacy exists primarily at the level of individual sub-consciousness, as such the organisation has limited influence over it (Oliver, 1991). Cognitive legitimacy can take two forms: comprehensibility (making sense of a chaotic environment where society confers legitimacy as a form of cultural understanding); and secondly, ‘taken-for-granted’ legitimacy (where cultural normality is unimaginable without the organisation).

Moral legitimacy is gained when society deems the organisation and/or its actions to be desirable. It represents a positive normative evaluation of the organisation whereby moral

judgements are made on the organisation's outputs, processes, structures and people. Moral legitimacy is gained through open and robust public debate of the worthiness of the organisation and is therefore dependent on effective communication (Palazzo and Scherer, 2006). Moral legitimacy comprises four sub-forms of legitimacy: consequential legitimacy (evaluation of the quality and value of outputs and achievements); procedural legitimacy (evaluation of the techniques and processes adopted to deliver outcomes); structural legitimacy (evaluation of the culture, practices and values that underpin the organisation); and fourthly, personal legitimacy (evaluation of the capability, charisma and style of the organisation's leadership and representatives).

The research study will utilise the Suchman (1995) definition and framework of legitimacy to understand how the legitimacy of the entrepreneurial university is shaped. Suchman's approach was chosen not only because of its seminal reputation and recognition as a "pivotal" text (Spear et al., 2013: 5), but because it provides the researcher the means "to become involved in the development of institutional theory at both theoretical and empirical levels" (Deephouse and Suchman, 2008: 52). Other theories of legitimacy were considered. For example, Buchanan (2007) emphasises normative consideration, but lacks causal explanation. Beetham (1991) argues for power as the critical determinant of legitimacy whilst downplaying social expectation, whereas Dellmuth and Tallberg (2015) ground their analysis in sociological consideration but limit institutional analysis. Therefore, the researcher considers the framework proposed by Suchman (ibid.) balances institutional and strategic considerations, whilst providing a culturally grounded perspective of the organisation, appropriate for this research study.

In sum, the research study will utilise a framework of legitimacy grounded in corporate social responsibility literature comprising three components: pragmatic, moral and cognitive legitimacy (Suchman, 1995). The framework will highlight how the entrepreneurial university, both constitutively and performatively, interacts with different aspects of legitimacy.

The remainder of the chapter comprises a literature review describing how university legitimacy was historically established, how the entrepreneurial university came into being, and finally, what constitutes an entrepreneurial university. This will enable the reader to understand the antecedents of the entrepreneurial university and how legitimacy was established, before the study addresses the challenges of maintaining legitimacy in a market led environment, through a detailed analysis of contemporary opinion and perspective.

2.2 The Historical Legitimacy of the University

Many of the very earliest European universities have their origins in the Christian church. For example, the universities of Paris and Bologna arose in the twelfth century from cathedral schools under the direction of the catholic papacy. Student learning was the means to translate and develop a deeper understanding of the vast archive of historical and classical works from the likes of Aristotle, Euclid and Galen (Woods Jr, 2012). At this time, notable universities began to receive the advocacy of the Pope with the award of a papal charter. Monarchies also issued similar charters in recognition of the scholarly endeavours of these early universities. Scott (2011) argued this created a tension between universal institutions (the church) and developing national state structures (the monarchy). However, endorsement by the church and monarch did help legitimise these fledgling universities.

Chartered universities were established in many cities across Europe in a mimetic fashion, primarily focused on teaching. With subjects including the study of law, philosophy, medicine and theology they facilitated the dissemination of knowledge and helped to maintain the influence of the church across society. Whilst for the monarchy, trained scholars took on important roles within royal bureaucracies, contributing to the development of nation state structures (Pedersen, 1997). For both the church and the monarchy, university legitimisation was pragmatic, based on need and mutually reinforcing.

In the early 19th century and founded in the philosophy of German Enlightenment, the inherent conflict in values between church and university was recognised. Driven by liberal and humanistic values, Alexander Humboldt challenged the church university model, espousing the importance of independent scholarly enquiry. The established cultural tradition, based upon religious belief and practice, began to come under pressure from the emerging culture of reason, logic and rationality. Humboldt universities began to create their own principles for legitimisation. These included the freedom for independent thought, the exchange of universal knowledge and the emphasis on research and critical enquiry as key components of learning (Audretsch, 2014). Teaching was aligned to emerging research rather than the reproduction of existing knowledge.

As the industrial revolution gave rise to enhanced living standards, secular cultural awareness grew. The Humboldt university model became the preeminent university structure across Europe, especially in those countries with immature national state structures (Delanty, 2002).

The civilising effect of research based learning and the mobility of newly created knowledge established a moral legitimacy for Humboldt universities, with them being seen as critical to the cultural, as well as scientific progress, of the emerging nation state (Kerr, 1963).

The Humboldt university model provided the foundation for the modern university and was widely adopted across Europe and America to become a “globally dominant model, and research, the determinant of its mobile and universal value” (King et al., 2011: 3). In part, it derived legitimacy by creating an elite institution, with its faculties and disciplines protected from the realities of the world outside academia. However, to maintain its legitimacy, the Humboldt model would need to adapt to the political and cultural diversity in maturing nation states and the economic imperatives of an increasingly connected world. The following section explores these critical challenges.

2.2.1 Nation State Driven Legitimacy

As nation states matured during the 18th and 19th centuries, national governments began to establish different political and cultural priorities. Gellert (1993) identifies three distinct priorities driving the configuration of European universities in the mid 19th Century: academic research in Germany; professional training in France; and personality development in Great Britain.

In Germany, universities adopted the Humboldtian model where learning was research centric and academic freedom considered sacrosanct. As this tradition prioritises the independence of academics to create new knowledge, over instrumental economic benefit, research is likely to follow the preferences of the academic or professor rather than the needs of society and as such, is unlikely to be applied or practical in nature. There is no differentiation in importance between science and the humanities (Ash, 2006). Legitimacy is therefore not based on the research output, but rather on the personal reputations of those academics and scholars undertaking the research. It is a moral based legitimacy. Gellert (1993) argues that the creation and dissemination of knowledge is the primary mission of a Humboldt university, and since Humboldt Universities are government funded and the resulting education systems centrally structured, the public good nature of the university is emphasised. Hence, the quality of research generated significantly affects the perceived value of the university, further emphasising consequential and moral legitimacy.

In France, the Napoleonic model was adopted where higher education was viewed primarily as a public good for the purpose of creating the professionals required to support the public sector needs of the nation. Universities of the Napoleonic tradition were highly directed by central government with the emphasis on the professional accreditation of learning outcomes (Neave, 2003). As the vehicle for professional development, practical subjects such as engineering are prioritised over the humanities and learning focuses on the understanding of existing knowledge, practices and principles, with research and the generation of new knowledge taking place outside the university (Arthur et al., 2007). Driven predominantly by the state, universities must undergo a political process of transformation that looks to serve the needs of society as a whole as well as government. Legitimacy is therefore driven by the self-interest of the state and is pragmatic in nature. For the universities, academics and scholars, legitimacy is a question of exchange centred on professional development and career progression.

In Great Britain, an Anglo-Saxon model was adopted. Highly influenced by Cardinal Newman's "Idea of the University" written in 1852 (Delanty, 2002). Based on pastoral traditions, the emphasis was on the development of an individual's character through a well-rounded, liberal education. Universities such as Oxford and Cambridge embodied this philosophy, focusing less on subject depth and the development of specific skills or expertise, and more on a holistic education with breadth (Little, 2001). The learning process is centred on the relationship between teacher and student. It is a personal learning journey developing character and personality that puts "emphasis on professionalism, rather than technical (and vocational) knowledge and skills" (Sam and Van Der Sijde, 2014: 894). Felt and Glanz (2002) argue that to facilitate such personalised scholarship, universities must be highly autonomous and exercise great control over curriculum, university structure and governance and the recruitment of staff. The state (government) has little active role in the operation of its universities, deeming them as a necessary and inevitable part of society, with the universities themselves best placed to dictate how they execute their duties. Legitimacy is therefore cognitive, conforming to a paradigm that reflects the British culture and class system prevalent in the 19th and 20th century (Reay, 2016).

In the 19th century, the German Humboldt model was initially adopted by American universities for its strong research focus aligning to the American cultural ideal of a nation of discovery and new frontiers (Carlsson et al., 2009). However, Delanty (2002: 36) argues American universities were quickly "reinvented around a more civic understanding of education". Less centralised than its European counterparts, the American university responded to the local need for agriculture and mechanisation advancement (Hofstadter and Smith, 1962). Whilst adopting certain aspects

from the European university models, the American model implemented many unique features such as a credit-based curriculum, competitive research funding and multi-disciplinary education that have been copied by many nations across the globe (Salmi, 2001). Sam and Van Der Sijde (2014: 895) refer to the American university as a “hybrid model” and as such it exhibits elements of pragmatic, moral and cognitive legitimacy. Nevertheless, as Rothblatt (1997) argues, its dominating characteristic is a responsiveness and adaptability, that creates an overarching pragmatic legitimacy, making the American university model one of the most influential education systems across the globe. The American model is the archetype for promoting “social reform and processes of democratization” (Scott, 2011: 60) that became highly prevalent in the 20th century. The following section discusses these socioeconomic developments and their impact on the legitimacy of the university.

2.2.2 Economic Driven Legitimacy

The Humboldt model of the university prevailed from the early 19th century until the mid 20th century. During this period the dominant economic theory, proposed by Robert Solow (1956), espoused production (economic output) to be determined by the relationship between capital (machinery) and manual labour (to operate the machinery). Audretsch (2014) argues that since the role of the university is focused on educating students through critique and research, it had little connection to unskilled labour and the production of capital. The university was considered unimportant to economic output under Solow’s assumptions. The legitimacy of the university did not depend on its contribution to the economy during this period. As Tierney (2011) observes, maintaining its elite status, so to attract either the religious or wealthy into scholarship, legitimised the university, not the public good.

However, as Delanty (2002) argued, in America the Humboldt model of the university was extended to include the civic dimension through the Land Grant Act of 1862. Land Grant universities would provide training to support local agriculture and industrial development, in addition to traditional scholarship. The pragmatic dimension to university legitimacy strengthens as the local community recognise the impact of university research on its economic welfare (Sternberg, 2010). Here the affiliation between the state and the university begins to lessen, as the bonds between the local region and university grow (Bender, 1988). Culturally driven legitimacy becomes less important.

In parallel to the development of Land Grant Universities in America, the importance of civic universities in UK, including Liverpool, Newcastle, Bristol and Manchester was growing. Successful local entrepreneurs provided significant funds to help build capabilities between the university and regional industry that would serve the local community and develop a skilled workforce (Powell and Dayson, 2013). Legitimacy was once again pragmatic and responsive to shared interest. These civic universities began to extend the Humboldtian faculty model to embrace disciplines based on societal functions such as engineering and architecture. Kerr (1963) argues that universities were becoming more flexible in meeting the needs of society, putting pressure on internal faculty organisation, but increasing their structural legitimacy where university objectives are consistent with its environment.

Audretsch (2014: 316) argues the shift in universities from their Humboldtian focus on cultural enlightenment to becoming “key engines driving the growth of the economy” heralds the second stage of university evolution. This was supported by Romer’s (1986) assertion that knowledge, due to technological and communications advances, was emerging as a key factor of production alongside capital and unskilled labour. In this context and under such theoretical assumptions, Audretsch and Keilbach (2004) argue that the knowledge capital generated by universities now becomes an important consideration when analysing regional economic growth. Etzkowitz and Stevens (1995: 29) endorse this argument, recognising the importance of the university increased in the eyes of policy makers, who argue for the “crucial role of the federal government in funding basic research carried out in universities”.

Nevertheless, Audretsch (2014: 317) argues that “the core of the university remains the basic disciplines, fields and academic traditions comprising the Humboldt University” and therefore external economic imperatives did not necessarily lead universities to change their internal structure, functions or governance mechanisms. Even though research became more applied targeting external, social needs, the knowledge created often failed to translate into innovation in the real world. A “knowledge filter” appeared to operate, defined as a “gap between the investment in new knowledge and its commercialisation” (Audretsch, 2014: 316). Crow (2008: 16) argues an “institutional inertia” may be operating to protect the traditional legitimacy of university that prioritises deep academic specialism over the creation of products with commercial potential, that still operates today. This is echoed by Etzkowitz and Dzisah (2015) who highlight academic attitudes towards profit driven work and the tensions between the public and private roles of a university.

Etzkowitz and Stevens (1995) argue it was only when governments began to reconsider who owned the output of publically funded research that universities started to take responsibility for the commercialisation of research leading to the generation of economic benefit. This was in part driven by Bayh-Dole Act of 1980, which encouraged the 'spill-over' of knowledge by allowing US tax dollars to support university research, the proceeds of which would be retained by the universities and not returned directly to the taxpayer (Audretsch, 2014). The entrepreneurial university began to emerge and with it, new questions of university legitimacy.

The following section identifies factors that shaped the university's entrepreneurial inclination and explores the initial implications for its legitimacy. The factors identified represent potential causal influences for entrepreneurial university legitimacy and as such will help guide the initial scope of analysis for the study.

2.3 The Emergence of the Entrepreneurial University

The increase in the entrepreneurial behaviour of universities over the last 50 years can be attributed to many factors. Firstly, it is commonly recognised a significant upturn in university commercial activity began in the United States as a result of the Bayh-Dole Act in 1980, leading to “the emergence of the Technology Transfer phenomenon” (Yusof and Jain, 2010: 81). However, to restrict the rationale for the increase in university entrepreneurial behaviour to purely the commercial exploitation of university research underestimates the role of government policy, the agency of university transformation and the impact of an ever changing environment (Gibb and Haskins, 2014).

Government policy regarding the entrepreneurial university has extended beyond intellectual property rights, positioning the university as a central lever for regional socioeconomic development (Powers and McDougall, 2005b). This has opened up universities to market competition (Marginson, 2006), increasing student access through different funding models (Owen et al., 2013) and the imposition of managerial best practice (Dill, 2014).

Beyond government policy, the university may choose to take an entrepreneurial path through a process of internal transformation. It may wish to secure autonomy, acting as an independent entity free of government interference and reducing its dependency on state funding by generating its own revenue streams (Clark, 1998a). Internal transformation can be achieved in various ways including organisational transformation and restructuring (Clark, 1998a), collaboration and partnership (Etzkowitz, 2004), through strategic action and empowerment (Kirby, 2006) and by process and functional realignment (Rothaermel et al., 2007).

Finally, the environment and context in which the university is located has changed. The shift from a manufacturing to a service economy has increased the prevalence of knowledge and led to the emergence of an entrepreneurial society (Audretsch, 2014). Whilst cross-national factors impacting the university include: the changing role of the state; shifting population demographics; emerging new technologies; and, increasing globalisation (Sporn, 2001).

The following section will consider each factor (commercial exploitation of research, government policy, internal transformation, and the changing environment) to describe how the entrepreneurial university emerged and the potential impact on its legitimacy.

2.3.1 Commercial Exploitation of University Research

University research presents three primary opportunities for commercial revenue (patenting, licensing and the creation of standalone companies) and is collectively referred to in the literature as ‘university technology transfer’ (Lee, 1996). The phenomenon, commonly credited as originating at MIT and Stanford University, provides the foundation for what Etzkowitz (1990) refers to as ‘the second academic revolution’ where university generated theoretical research combines with practical industrial research, through university/industry collaboration that can take many forms. Etzkowitz (2014) argues that knowledge is polyvalent and can meet several objectives simultaneously, including theoretical advancement and the generation of economic returns. D’este and Perkmann (2011) support this position, arguing academic resistance to research commercialisation can be overcome, if alignment occurs between academic research objectives and the development needs of industry, allowing natural partnerships to occur. Welsh et al. (2008) argue that university/industry collaboration can introduce the university to new cultural and organisational models leading to new ways of doing things, potentially increasing innovation. Such collaboration brings university knowledge to the marketplace providing practical benefits to the public that may otherwise have remained theoretical and untapped (Powell and Colyvas, 2008). As well as generating revenue for the university (Jensen and Thursby, 2001), university/industry collaborations can also contribute to economic growth (Shane, 2004).

However, Wright et al. (2008) argue that successful university technology transfer has only been achieved consistently by the very elite universities, as mid-range universities struggle to establish the capabilities and relationships necessary for effective industry collaboration. Lester and Sotarauta (2007) had previously shown that universities who attempt to compete with the small number of ‘world class universities’ to commercialise academic research on a national and global scale, may create negative economic consequences as they neglect their local region and underestimate the importance of local relationships in the knowledge transfer process. They may also reduce institutional diversity as they try to mimic, often unsuccessfully, a globalised model of the university. Despite these consequences, Siegel and Wright (2015) suggest that mid-range universities will be forced to persist in their industry collaborations, not only to be seen as competitive equals with elite universities, but also to secure funding from private third parties who consider industrial collaboration important.

Furthermore, university engagement with industry may create a conflict of interest. Renault (2006) questions whether academics will remain sufficiently motivated to publish the findings of academic research, if in doing so, the economic opportunities from technology patents are

reduced. Academics may become secretive about their research (Louis et al., 2001). Heller and Eisenberg (1998) argue that any commercial interest underpinning academic research, will directly impinge the public good purpose of a university creating an 'anti-commons' effect. This is where knowledge that should be freely available fails to transfer to the wider society. Additionally, Rosenberg and Nelson (1994: 94) argue that university technology transfer is inefficient as it creates "unnecessary transaction costs by encapsulating knowledge in patents that might otherwise flow freely to industry". The direction and content of academic research may also favour those topics with the greatest profit potential, rather than those serving social need (Krimsky, 2004), with less time spent on research without immediate economic potential (Friedman and Silberman, 2003). However, Thursby et al. (2007) demonstrate this effect might be limited, as the separation between applied and theoretical research is quite pronounced and where it does exist, both objectives are usually satisfied at the expense of the academic's personal time.

Finally, Siegel and Wright (2015) argue that the traditional view of university entrepreneurialism based on a faculty level focus seeking financial rewards from intellectual property licensing and patents, facilitated by formal technology transfer mechanisms such as science parks, is becoming less pertinent. They argue that in recent years there has been an increased focus on wider socioeconomic opportunities, driven by increasing numbers of entrepreneurially aware students and graduates, and facilitated by smaller scale infrastructure such as accelerators and incubators, often financed by combinations of non-university public investment and private venture capital.

In sum, the commercial exploitation of academic research has been a significant objective for many universities. Despite offering new sources of revenue and with the potential to stimulate economic development, university technology transfer is not without risk to the legitimacy of the university. Most significantly, by compromising the traditional public good purpose of the university and changing the priorities of academics, moral consequential legitimacy may be reduced as the interface between society and the university is increasingly bridged by industry.

2.3.2 Government Policy and the Entrepreneurial University

There is a perception in policy making circles that technology innovation has an increasingly important affect on economic growth and consequently universities, as a primary source of technology innovation, are ideally placed to influence the economic prosperity of the nation (Azagra-Caro et al., 2006). In parallel, the entrepreneurial university literature emphasises the

change happening in universities is being significantly influenced by government policy reforms espousing “New Public Management” (Dill, 2014: 1). Evidence of this can be seen by market reforms encouraging competition in the university sector, increasing access to university education and creating management practices mirroring the private sector.

The following section explores each of these policy imperatives (socioeconomic development; market-competition and access; and management practices) to understand their influence on shaping the emergence of the entrepreneurial university and the consequences on its legitimacy.

2.3.2.1 Policies Targeting Socioeconomic Development

Legislative changes gave universities greater ownership and control over intellectual property rights to encourage them to bring innovation to the market (Powers, 2004). However, there is increasing pressure on universities by policy makers to play a role in economic development by encouraging collaboration between industry and government agencies (Calvert and Martin, 2001).

Etzkowitz and Leydesdorff (2000) argue that formal and informal interactions between academia, the state and industry will create new forms of organisation, technology and economic activity, where new knowledge is created not only from the forming of new relationships between institutions, but also from the internal transformation of institutions in response to the relationships they form, which will continually disrupt existing structures and lead to a continuous innovation. Etzkowitz and Leydesdorff (2000) refer to this as a ‘triple helix model’ that occurs across multiple scales for each institution: regional, national or global. This overcomes the constraint of traditional policy that is often directed at a single level, national or regional and is planned and implemented in a linear process.

Supporting this, Guerrero and Urbano argue that policy makers targeting economic growth and job creation have recognised the importance of knowledge-based enterprise, where universities act as a “knowledge hub and a disseminating institution” (Guerrero and Urbano, 2012: 43) in collaboration with government and industry. They argue that a university operates within an external network, alongside government agencies and industry, and through the exchange of ideas and knowledge encourage entrepreneurial behaviour to develop across the university and society in general. As universities become more entrepreneurially aware and more engaged in entrepreneurial activity beyond their traditional and core academic functions of teaching and

research, the role of university in wider economic development becomes more pertinent. As predicted by endogenous growth theory, Guerrero et al. (2015) argue that a fundamental relationship exists between knowledge led innovation and long-term economic growth, leading to a policy focus on the development of knowledge capital and the role of universities in its production.

However, Kitagawa (2005) argues the degree by which national policy can influence the effectiveness of university/government/industry relationships depends on the amount of centralisation in the university system. A highly decentralised system, where authority is localised and universities exhibit a high degree of autonomy, may lead to highly diversified regional structures, limiting national policy influence. Additionally, the contribution of the entrepreneurial university to regional prosperity is often taken for granted by policy makers, yet insufficient analysis has been undertaken to show what structures within the university account for this effect (Shattock, 2006). This is echoed by Lendel (2010) who argues that it is difficult to understand the interdependencies between a university's internal and external capabilities and regional development due to the complexities of the regional ecosystem. To counter these constraints, Guerrero et al. argue that policy should be directed not just at the organisational level focusing on the "commercialisation of innovation" but also at the micro level, to give people the skills and confidence to "thrive in the emerging entrepreneurial society" (Guerrero et al., 2016: 118). Finally, across the literature it is recognised that policies to encourage entrepreneurialism within universities may not only be driven by the need for regional socioeconomic development, but may also be motivated by a government's desire for universities to generate their own revenue, and hence reduce the funding burden for the state (Etzkowitz, 2004).

In sum, policies that encourage universities to contribute to regional socioeconomic development will enhance society's awareness of the positive impact of the university and increase consequential legitimacy. However, this affect may be diminished if universities are perceived as profiting from policy, for example earning excessive royalties from regional technology transfer activity (Powers and McDougall, 2005a).

2.3.2.2 Policies Promoting Market Competition and Access in University Education

During the 1990's, university sectors across the globe became increasingly shaped by the ideas of New Institutional Economics (NIE), a form of organisational theory founded on institutional

theory (Powell and DiMaggio, 2012) and the neo classical economic assumptions espoused by Alfred Marshall (2009). NIE is founded on the principles that market competition is more effective than state intervention as a way to allocate scarce resources; that fully informed individuals make rational buying choices more effectively than government bureaucracies; and finally, that principle/agent relationships are an effective way of minimising transaction costs (Hood, 1991). Governments adopting policy based on NIE seek to reduce the cost of public service provision whilst increasing consumer choice as the market diversifies to meet different consumer needs. The following section discusses how policies based on NIE theory impact entrepreneurialism in the university sector and highlights firstly, the principle of competition embodied in new research/funding processes; secondly, the proliferation of university performance league tables; and thirdly, NIE policies to increase participation and access through the utilisation of tuition fees to fund university teaching activity (Dill, 2014).

Competition through Research Funding

The competitive allocation of resource to fund university research has received significant policy attention (Dill and van Vught, 2010b). The block allocation of funds by central government has been reduced in favour of performance-based research funding (PBRF) systems forcing universities to compete against each other (Hicks, 2012). Such systems are output rather than input-focused. The key benefit of such a process is to allocate scarce resources to those institutions most able to deliver positive research outcomes and thus motivate underperforming universities to do better (Herbst, 2007). Gordon (2005) argues the focus on research outcomes leads to an increased quantity of higher quality research. Additionally, resources can be directed to areas of national priority and assessment systems established to monitor progress, thus providing assurances over public spending (Elton, 2000). Universities also have new revenue opportunities as transnational organisations increasingly offer research grants, creating an international market for research funding (Currie, 2008). By creating a competitive market for research funding, Whitley argues universities had to move beyond being “administrative shells” (2011: 12) to develop a strategic mindset and entrepreneurial capabilities.

However, significant objections to competitive research funding are raised in the literature. Kean (2006) argues the process for allocating and securing university research funding has become a university and academic capability in itself, consuming both time and financial resource that could be more effectively spent on teaching. Sotiris (2012) echoes this argument claiming the search for external funding, be it research funding, tuition fee income or general sponsorship, creates a competitive process across and within universities that has accelerated the

marketisation of higher education. Additionally, Dill (2014) argues that whilst all universities are not world-class, academic staff across all universities tend to believe they as academics are world-class. They therefore pursue individual strategies (chasing citations) and support institutional strategies (high profile research projects) applicable to world-class institutions. This forces the majority of universities to adopt a research centric culture, actively competing for the best research focused academics, students and post-graduates, driving homogeneity across the university sector. This is reinforced by the allocation of university funds contingent on research output, university performance and ranking mechanisms that emphasise research above teaching capabilities. Separately, Heinrich and Marschke (2010) argue that as the characteristics of performance measures become known opportunities arise to 'game the system'. Supporting this, Butler (2003) demonstrates that by using bibliometric methods, citation and publication counts, academics align and target work that reflects research funding priorities, rather than their own research interests.

In sum, policies to promote performance-based research funding naturally create an economic driven pragmatic legitimacy as scarce resources are allocated to achieve maximum economic return. However, academic research autonomy and diversity across the university sector may be impinged if the priorities and influence of funding agencies dominate the research agenda (Marginson, 1997).

Competition through League Tables and Quality Ranking Systems

The proliferation of league tables, ranking systems and other quality measurement systems has facilitated competition among universities by influencing student choice (Dill and Beerkens, 2010).

Teixeira et al. (2006) argue that ranking systems help to support an important NIE assumption in that better informed customers, potential students, will make better buying decisions. As students should rationally choose better performing universities, poorer performing universities will be forced to improve, thus improving the overall societal provision of university education.

However, the literature on the effectiveness of national ranking systems generally concurs that "rankings not only fail to produce the expected efficiency benefits but likely so distort the forces of the competitive market" (Dill, 2011: 446). The reasons given include: the complexity in creating statistically valid rankings (Hazelkorn, 2015); their limited influence in creating better

student outcomes (Pascarella and Terenzini, 2005); and the inherent bias towards the elite university (Dill and Soo, 2005).

Early ranking systems were commercially produced and had a national and institutional focus (e.g. Times Higher Education Supplement). In recent times, rankings systems have become internationalised with producers including: intergovernmental agencies (e.g. World Trade Organisation, World Bank); quality assurance networks; and voluntary civil society organisations (Dill, 2011). However, King (2009) argues that global rankings have done little to address the recognised inadequacies of national rankings and may have exacerbated university hegemony as the increasing mobility of international students gravitate toward elite institutions.

Additionally, university rankings primarily focus on the quality of research output and to a lesser extent the quality of teaching. Very little attention is paid to the university's contribution to economic and social development within its region and therefore provide limited policy guidance of how best to fund tertiary education as a public good (Etzkowitz, 2016). Supporting this, Leydesdorff et al. (2016) argue that metrics relating to remuneration of degree courses will drive students to select career paths based on salary, rather than the needs of society.

Finally, as ranking systems create competition between universities, universities will naturally adopt strategies to help them succeed against specific metrics. These may include the target selection of high achieving graduate and post-graduate students, and the appointment of academic staff based on research reputation rather than teaching capability (Dill and Beerkens, 2010). Encouraging universities to focus on a specific metric diverts resource into one aspect of the universities mission to the detriment of its other missions.

In sum, by creating a dimension by which universities compete, league tables and ranking systems have encouraged universities to adopt entrepreneurial behaviours. However, the expected impact on legitimacy is less certain as the university's historic reputation remains the key determinant of league table performance, rather than potential student outcomes or public good benefit (Naidoo, 2016).

Improving Access through Tuition Fees and Student Loans

Increasing participation in higher education in general and access to university specifically has been a policy goal for many governments over the last twenty years (Rinne and Koivula, 2009). To support the increase in the number of people attending university the burden of university

funding has shifted from the state to the student through a charging mechanism embodied by a system of 'university student fees' (Miller, 2010).

As governments have limited resources that must be allocated across all public services, a state-funded higher education system will be financially constrained, competing against other public services, with a university operating under a government budget that will largely determine the number of students it can support. Access and participation is therefore limited. This constraint can be partially removed if the student meets the university tuition cost. Supporting this, Solis (2017) argues if equitable loan finance is available to fund this tuition cost, social mobility will improve as participation from lower income groups will be up to 20% higher than otherwise.

Governments and transnational organisations have argued that the imposition of student fees should support the market for higher education by allowing universities to adopt a strategic position with regard to the teaching services they offer (courses) and their respective price points, encouraging university entrepreneurial behaviour that would benefit the student as a newly empowered consumer (Commission and Commission, 2005). Gibb asserts that as teaching costs will be primarily met by student fees, university focus "will be on attracting students and their fee income" (2012: 5). As such, student enrolment becomes a competitive process across the university sector, both nationally and increasingly internationally, that requires "a more entrepreneurial response from institutions" (Gibb et al., 2012: 7). As the student population is a heterogeneous group with different interests, academic capabilities and financial means, it was assumed that to attract student consumers in sufficient numbers to make courses economically viable, the entrepreneurial response from universities would involve differentiating their offer, services and charges, thus creating a more diversified higher education sector capable of meeting the diverse needs of students (Willetts, 2015).

In addition, Hillman (2013) argues that shifting the funding burden from the taxpayer to the student better reflects the distribution of benefits for university outcomes. Whilst not dismissing the public good nature of the university and the benefit to society in general, a significant benefit accrues to the student attending university in terms of increased career opportunities and better salary expectations (Walker and Zhu, 2013).

However, many strong arguments against the imposition of student tuition fees can be found in the literature (Douglass and Keeling, 2008).

Firstly, (Naidoo, 2016) argues that empowering the student with consumer like power has not led to increased university diversity and has failed to increase student choice. For example in the UK, the majority of universities charge the full £9000 fee allowed, as charging anything less may be construed as offering an inferior service. For university education, the fee charged correlates to perceived value (Wyness, 2013).

Secondly, creating a market based on tuition fees to allocate scarce resources may not be efficient in the university sector for several reasons (Hemsley-Brown, 2011). Firstly, high levels of government intervention are present in both the supply side and demand side of university education that will influence outcomes. Demand side interventions include student number caps and maximum fee charges, whilst on the supply side loans remain heavily subsidised by the taxpayer with significant sums never likely to be repaid (Bertolin, 2011). Next, Marginson (2013) argues that significant 'barriers to entry' exist in the market for university education that limit new providers from entering and fair competition among incumbents. These barriers include university prestige, student selection processes and research reputation. Finally, to function correctly, a market must limit information asymmetry between buyers and sellers. Weimer and Vining (2017) argue that this cannot apply to university education as the student will only truly appreciate the service they have acquired after they have started their course (i.e. purchased the product). Brown (2012b) supports this arguing student choice is based primarily on intangible factors such as personal bias and university reputation, rather than hard information relating to present-day university performance.

The next argument against the imposition of student tuition fees relates to the changing dynamic between the academic and student resulting from the commercialisation of their relationship (Barnett, 2010). This could result in the student believing they are buying a degree, rather than access to resources to help them develop their capabilities and knowledge (Williams, 2012). Also, Chong and Ahmed (2015) argue there is a tension between universities prioritising the student as a customer (purchasing a product) against that of a consumer (using the product), often resulting in a misalignment between entry-grade conditions and academic capabilities. Next, Kandiko and Mawer (2013) argue that student expectations of the service they receive, or more specifically the outcomes they achieve, will be higher and create a 'value for money' challenge to university legitimacy. Finally, as the burden of funding shifts from government to student, the responsibility for university educational outcomes becomes increasingly the sole priority of the student. The government adopts the position of 'information provider' to inform student choice, rather than

the purchaser of university services where the quality assurance of outcomes takes greater priority (Davies, 2012).

A final argument against the imposition of student tuition fees concerns the contingent relationship between fee income and university funding. Over the last 20 years in the UK, overall central government spending on the university sector has fallen (Shattock, 2013). Research by Chrisman et al. (1995) shows there is a long-term trend for government policy to reduce overall university spending. Income from student tuition fees has largely offset the higher teaching cost due to increased participation but may face considerable pressure if demand for university places falls (Hillman and Kindschy, 2018). McMahon (2009) argues that if a university cannot meet its teaching costs through tuition fees or government funding it will focus on management efficiencies and prioritise only profitable courses or faculties. Supporting this, Gibb et al. (2012) argue that university funding arrangements are becoming increasingly complex and involve a mix of public and private mechanisms. Concerns regarding the independence of state funded universities are giving way to concerns about the conditions attached to private finance (Leslie and Ramey, 1988)

In sum, the imposition of student tuition fees has further supported government policy to increase university access and participation. In creating a market for university courses, with the student as customer, universities have been compelled to develop their entrepreneurial tendencies. In this market the relationship between university and student is defined across pragmatic and moral dimensions of legitimacy.

2.3.2.3 Policies to Professionalise University Management

The policies described above, inspired by New Institutional Economics (NIE), look to create an external market for university services driving the need for entrepreneurial behaviour within the university sector (Dill and Beerken, 2010). NIE, underpinned by agency theory and transaction cost analysis, forces policy makers to consider the university as a network of contractual arrangements that must be carefully managed. As argued by Davis, universities should be seen “not as production functions or firms, but as governance structures” (Davis, 1997: 228).

The following section describes how the internal management and governance of the university has evolved in response to NIE inspired policy, resulting in an entrepreneurial imperative emerging across the university sector. Three themes have been identified in the literature:

governance impact on organisational structure; governance and power; and finally, governance and academic identity.

Governance Impact on Organisational Structure

During the 1990's, in response to emerging market imperatives, governance structures within universities shifted from being academic led to a form of managerialism labelled 'New Public Management' (NPM). This increasingly adopted business management like practices within universities (Deem et al., 2007). NPM is centred on the concept of management by objectives and seeks to emphasise the setting and acceptance of unambiguous goals aligned to clear and defined reporting relationships (Hood, 1991).

NPM attempts to overcome the policy paradox where universities are given more autonomy over strategy, revenue generation and financial management, but remain highly regulated by legislation and quality assurance processes (both formal and informal) aimed at protecting student access and student funding mechanisms (Christensen, 2011). As a result, NPM is thought of as a rules-based management process encompassing "formal planning processes and information systems; tight accountability and standard setting; audits; order; and demarcation" (Gibb et al., 2012: 18). Essentially, it is a 'top-down' leadership model where objectives in the form of specific performance targets are cascaded from university administration, to faculty, to department to academic (Thomson, 1992).

However, NPM faces several challenges. Firstly, 'top-down' management approaches often fail to reflect the complexity of academic life and the tension between macro and micro level social politics (Barrett, 2004). Secondly, NPM is often only partially implemented prioritising those processes with hard tangible outcomes, most often financial. Less focus is paid to processes driving the democratic accountability needed to ensure the public good responsibilities of the university are being met (Burnes et al., 2014). Next, the articulation of defined goals helps define a university's responsibilities, but it does not absolve government of their overall public accountability. The institutionalisation of NPM across government and university is not well understood (Aoki, 2015). This creates a risk that community, social justice and equity may become marginalised as a result of the university's clarified focus on hard targets (Pollitt, 1990). Finally, centralised top-down management approaches often fail to reflect the dynamic nature of technology change and the volatility brought on by social change that require a more distributed form of leadership to recognise and action (Burnes et al., 2014).

Top-down management approaches may stifle entrepreneurialism. Philpott et al. (2011) argue that academics are more likely to be inspired by fellow academics and peers and therefore be naturally inclined to innovate and drive change from the bottom-up. Sporn supports this position arguing for a “differentiated structure to make it easier for universities to respond to different environmental demands” (2001: 129), emphasising the autonomy and responsiveness of the academic is critical, if the university is to adapt to change.

In sum, NPM does not fully enable entrepreneurialism in universities but has developed a culture of ‘professionalism’ where dedicated non-academic managers determine and deliver overall university strategy (Kolsaker, 2008). However, this has the potential to create a power imbalance between managers/administrators and academic staff that will constrain entrepreneurial capacity (Deem et al., 2003). This power imbalance will be explored in the next section.

Governance and Power

The imposition of clear goals, performance targets and hierarchical reporting relationships, has driven a culture of professionalised management that has increased university responsiveness whilst softening academic responsibility. This has led to a shift in power within universities, from academia to administration and management (Kimber and Ehrich, 2015). This has several implications.

Firstly, shifting power away from academia will adversely impact the collegial culture within the university faculty and may reduce democratic representation (Lynch et al., 2012). Secondly, management and administrative accountability often reduces the influence of the academic but not the responsibility (Bolden, 2011). For example, the role of academic course and programme co-ordinators, with a high level of responsibility that generates significant extra workload yet earns little incremental reward, receive limited recognition and only have ostensible influence (Murphy and Curtis, 2013). University faculties and departments are heterogeneous in nature with varying academic cultures, values and external focus. Centralised management risks creating internal competition where academics with reduced power and influence expend effort defending faculty values to the detriment of innovation (Bryman, 2007). Finally, a culture of symbolic observance may develop where academics appear to be compliant with management direction and governance but are, in actuality, adopting pragmatic approaches to overcome bureaucratic subjugation (Teelken, 2012).

Extensive organisational restructuring within universities has also contributed to the increasing power divide between management and academia. Hogan (2012) argues that disciplinary-based departments or schools are being replaced by larger units often headed by the newly created position of Pro-Vice Chancellor, responsible for the financial management of the unit. This further limits the influence and autonomy of academics, as Pro-Vice Chancellor loyalty is likely to be focused on central administration risking traditional collegiality.

Reducing the autonomy of academics may constrain entrepreneurialism. Bercovitz and Feldman argue that workplace structures may constrain individual creativity stating “individual attributes whilst important are conditioned by the local work environment” (2008: 85). In parallel, a limited understanding of opportunity and risk may exist in senior management without field and subject expertise, that constrains the entrepreneurial orientation of the university at all levels (Ahmad et al., 2014).

In sum, with the direction and strategy of universities increasingly falling under the auspices of non-academic professional managers, the reduced autonomy of academics may result in constrained strategic thinking and an inability for academics to effectively manage emerging opportunities and threats (Courtney et al., 2001). This may have a profound affect on academic identity.

Governance and Academic Identity

As noted by Shattock (2013) the popularity of NIE inspired policy has led to less governance and more management within universities. This has had a direct impact on the role of the academic and has reshaped academic identity. Winter and O'Donohue argue that academic identity based on “liberal values of truth and critical enquiry, appreciation of learning and scholarship and a passion for intellectual freedom” (2012: 565) is being contested as professionalised management impose performance targets, reporting requirements and process standards to bring a uniformity to the university.

Perceived changes in academic identity may directly affect job satisfaction, motivation, effectiveness and commitment (Edwards et al., 2009). Billot argues that NIE approaches mean that universities are no longer “academically autonomous” (2010: 714) and this has created a rift between how an academic views their role and the role as perceived by senior management.

However, Tjeldvoll (2011) argues that traditional academics may lack the management and transformation skills required to lead a university in the 21st century and concern over academic identity only reinforce the scholarly preference to pursue knowledge rather than change. Juntrasook (2014) argues that academic identity is dependent on the relationship between practice, context and responsibility. It is a dynamic construct describing the bond between the academic and institution, creating multiple interpretations of identity and multiple options for the academic. Similarly, Etzkowitz and Dzisah argue that the emerging knowledge society is driving a “cultural transformation” (2015: 10) in universities providing academics with new opportunities and choice across teaching, research and socioeconomic development.

In sum, traditional academic identity has been redefined as professionalised non-academic management asserts increasing influence within the university. As universities become more entrepreneurial, academics face an increasing dichotomy. Accepting on an epistemic level the need for change driven innovation, but struggling to accept on an ontological level their new academic identity (Barnett, 2005). Ultimately, redefined academic identity, resulting from an academic’s perception of a reduced sense of worth, may affect the legitimacy of the university. As Taylor et al. (2008) observe the loss of academic autonomy and freedom may lead to a reduced level of respect and public regard across society.

2.3.2.4 Summary: Government Policy and the Entrepreneurial University

This section highlighted how government policy shaped the emergence of the entrepreneurial university. Three aspects of the literature were reviewed: policies aimed at encouraging universities to support socioeconomic development; policies to encourage market competition and increase university participation; and finally, policies to shape internal management practices. Overall, policy seems not to have changed the input or control of the state, but rather it has changed the relationships between government, administrators, academics and students (Dobbins et al., 2011). The emphasis of policy has been to create a market for university services to foster choice, value and quality. However, if policy does not generate benefits across society or fails to enhance social justice, the public may view universities as increasingly anachronistic raising questions about their future legitimacy (Blass and Hayward, 2014). The university may be forced to manage this risk through a process of internal transformation.

2.3.3 *Internal Transformation into the Entrepreneurial University*

Up to this point, the chapter has discussed the emergence of the entrepreneurial university predominantly in terms of government affect. The first affect discussed was the need to commercialise the fruits of university research to support socioeconomic development. The second affect discussed was general government policy to influence university competitiveness, participation and management practice. This section will discuss the agency of the university to determine its own direction, purpose and structure.

In one of the earliest texts to discuss the concept of an entrepreneurial university, Etzkowitz (1983) suggests three important capabilities were developing in universities at the time. Firstly, teaching, research and enterprise activities were becoming more aligned. Secondly, the relationship between the university and industry was being increasingly formalised and managed. Finally and most importantly, the agency of academics to embark on their entrepreneurial journey was becoming more pronounced. As Etzkowitz argues: “If basic research is put aside because of commercial opportunities, it will be the result of scientists’ choice” (1983: 233).

The choice of academics to pursue external options alongside teaching and research began to influence the strategic intent of the university as they increasingly began to restructure and transform themselves with a focus on the external. The following section reviews the key literature relating to the internal transformation of universities intent on leveraging external entrepreneurial opportunity.

One of the most influential texts to describe the university’s transformation journey to an entrepreneurial configuration was ‘Creating Entrepreneurial Universities’ written by Burton Clark (Clark, 1998a). Clark espoused the freedom and agency of public universities and recognised they were increasingly seeking self-reliance, embracing external opportunity and continually looking to innovate. Clark described the attributes of an entrepreneurial university through “five transformational pathways” (1998a: 2) and argued that a university should seek “active self-determination” (1998a: 5) and look to “innovate how it goes about its business” (1998a: 4). He believed entrepreneurialism was very much about innovation and the processes allowing autonomous universities to change themselves.

Clark’s first transformational pathway, the ‘*strengthened steering core*’ describes a governance process focused on external opportunities and not overly constrained by university bureaucracy.

Individual academics are encouraged to find resources for the “institution as a whole” (Clark, 1998b: 9). The second pathway, the *‘expanded development periphery’* extends beyond current academic and management boundaries within and without the university to develop new stakeholder relationships facilitating interdisciplinary knowledge and externally focused innovation, whilst retaining current expertise. The third pathway, a *‘diversified funding base’* argues that diversified income is important as it helps secure autonomy from direct state control and reduces the dependency on public funding. The fourth pathway, a *‘stimulated academic heartland’* allows faculties and departments to integrate processes enabling entrepreneurial innovation with core teaching and research responsibilities, thus “reaching more strongly to the outside ... promoting third stream income” (Clark, 1998a: 7). Stimulating the *‘academic heartland’* may also provide additional opportunities for those academics and students wishing to extend their experience beyond the traditional roles of teaching and research (D’este and Perkmann, 2011). Clark’s final transformational pathway is *‘an integrated entrepreneurial culture’* is an “institutional perspective” (1998a: 8) related to innovation that connects the previous pathways providing the process by which entrepreneurial transformation is enacted.

However, Clark’s ideas have been criticised on ideological grounds, for its methodology and for failing to recognise certain real-world complexities.

In relation to ideology, Shattock (2010a) recognises the use of the word “entrepreneurial” was met with resistance in the academic community still sensitive to the policies of commercialisation and austerity within higher education associated with the 1980’s Conservative government. Similarly, Bronstein and Reihlen (2014) argue that the term “entrepreneurial university” is a socially constructed expression with no objective reality and is only constituted in discourse and will therefore take on different meaning in academic, business and government circles. Philpott et al. (2011) concur, arguing that different faculty attitudes lead to misunderstanding over what an *‘entrepreneurial university’* represents. Views vary from the *‘vehicle for innovation’* to the *‘means to commoditise education’*.

In terms of methodology, Deem (2001) argues that Clark’s study looks to make connections and commonalities across selected cases rather than search for unique differentiating characteristics. The inference being *‘entrepreneurial universities’* will converge to a form of homogeneity. This seems unrealistic for complex, multifaceted institutions situated in highly diverse historical and environmental contexts (Glynn et al., 2000). Deem argues that a process of “hybridisation” (2001: 13) more likely explains university transformation. Hybrid universities are influenced by

local constraints, practices, customs and culture. They evolve to create uniquely structured organisations rather than Clark's inference that universities are converging to a homogeneous structure, driven by global factors such as the proliferation of neoliberal economic policy and the creation of a global market for education. Next, Smith (1999) argues that there is a selection bias in Clark's methodology as the universities selected were all operating as successful research institutions with thriving links to external industry and government. Clark's selection of cases for his study also emphasise research centred universities rather than teaching universities, implying a contingent link between research capability and entrepreneurialism which may be false (Shattock, 2010a). There is no reason why teaching universities cannot be entrepreneurial (Temple, 2009). Finally, Deem (2001) argues that Clark, by focusing primarily on university senior management, presents an overly strategic and outward looking perspective. This fails to reflect the multitude of issues across different levels of the university and the practical challenges of day-to-day responsibility.

Clark has been criticised for failing to recognise real-world complexity. Finlay (2004) argues that Clark fails to show how individual behaviour permeates across a university to create an entrepreneurial culture. His model implicitly implies the university is entrepreneurial in itself, rather than representing the collective actions of the university's individual staff and students. Marginson and Considine (2000) argue that the impact on collegiality resulting from a stronger management hierarchy (a strengthened steering core) will limit the embedding of innovation and entrepreneurial spirit into the culture of a university. Therefore the university's academic staff will not truly engage or be able to identify with a university's enterprise mission. This reduces the university to a commercial enterprise prioritising the search for revenue above innovation. Williams (2003a) argues that Clark fails to appreciate the impact of risk in the entrepreneurial process. This is echoed by Barnett (2010) who argues that entrepreneurialism is a process of risk management where a university puts its capital at stake in the hope of generating returns. Finlay (2004) argues that Clark's model implies a university has limited influence over its environment. Clark ignores the many "overlapping and nested communities of practice" (Finlay, 2004: 432) across the university creating diversified solutions to complex problems situated within their own unique context, each capable of influencing their own internal and external environment. Finally, Shattock (2010a) argues that Clark underestimates the role of the state in higher education where policies and legislation targeting homogeneity across the university sector, quality assurance and increased participation will all impede autonomy.

To overcome the weaknesses of Clark's model, researchers have developed alternative transformation models based on theoretical perspectives that place a different emphasis on how the university can become entrepreneurial.

Etzkowitz (2004) argues for a partnership based model where the different parts of the university independently establish collaborations with industry and government. Faculties are seen to operate as semi-enterprises enabling them to generate revenue that can be invested into other areas of the university. Etzkowitz (2003) identifies the following characteristics to enable this: the ability to capitalise knowledge; cooperation between the university, industry and government (akin to Clark's expanded development periphery); university autonomy and financial independence (akin to Clark's diversified funding base); a willingness to adopt different operational structures reflecting the capabilities of the faculty (akin to Clark's stimulated academic heartland); and finally, having a culture receptive to change (akin to Clark's entrepreneurial culture). The key difference to Clark is the focus on collaboration rather than organisational restructuring.

Grounded in Ajzen's (2011) 'theory of planned behaviour', Kirby's (2006) model argues that individuals will act in an entrepreneurial manner if their working environment: provides them with confidence in their abilities to do so; has a favourable disposition to entrepreneurialism; and provides intrinsic reward for successful entrepreneurial outcomes. It is a model based on eight strategic actions that seeks to stimulate entrepreneurship through: endorsement; incorporation; implementation; communication; encouragement; recognition and reward; organisation; and promotion. The model differs from Clark in that the strategic actions empower academics and students across the entire university to be enterprising. It is a model of personal change rather than organisational change.

Finally, Rothaermel et al. (2007) present a conceptual schema based on a comprehensive literature review. They identify four themes encompassing the entrepreneurial university: research enabled entrepreneurialism; technology transfer productivity; the creation of new firms; and finally, an environment of innovation networks. Rothaermel et al. (2007) show how internal and external university processes are connected to describe how an entrepreneurial university functions. Gramescu and Bibu echo similar themes in their "organisational capability map" (2015: 98) connecting people, processes, resource tools and results (measurement) to legitimise the operation of the university. They conclude the combination of structure and culture within the entrepreneurial university is needed to balance risk with "chaotic action"

(Gramescu and Bibu, 2015: 102). The models of Rothaermel et al. and Gramescu and Bibu represent a functional view to transformation, rather than the leadership driven organisational transformation of Clark.

To summarise, Clark's seminal work "Creating Entrepreneurial Universities" has been highly influential in theorising the internal transformation of the university's entrepreneurial journey. It has been robustly critiqued in terms of its overall ideology, the methodology on which it was based and for empirical gaps in its findings. This has led to the development of different agency based perspectives on how the university can transform itself into an entrepreneurial university including collaboration and partnership (Etzkowitz, 2004), strategic action and empowerment (Kirby, 2006), and functional realignment (Rothaermel et al., 2007). The next section moves away from the agency of internal transformation to consider the structural imperatives of the changing external environment.

2.3.4 The Changing External Environment

The previous section reviewed arguments supporting the agency of internal university transformation. However, as the university sits within an historical context, has its own local policy pressures and specific internal transformation capabilities, the emerging configuration of the university will be unique and its ideal form will be a contested concept (Bratianu and Stanciu, 2010). What is not contested is that the external environment, increasingly global with a market-led orientation, has since the 1990's exerted greater pressure across all universities to become entrepreneurial (Taylor, 2012). The following section describes how the external environment is changing, encouraging entrepreneurialism and the impact this may have on university legitimacy.

Sporn (2001) describes five cross-national pressures driving change within universities. Firstly, national economies have restructured based on technological advances. Manufacturing and the use physical labour have decreased in importance as a source of economic productivity. Instead a services-based economy has emerged where knowledge and human capital is key. Etzkowitz (2006) argues that in knowledge led economies the entrepreneurial university will not only need to deliver teaching, research and entrepreneurial activity, but also take on functions previously delivered by the state and/or private corporations. This leads to interactions that have "blurred the boundaries between university, government and industry" (Sam and Van Der Sijde, 2014: 902). Bowman (2013) argues that the blurred apportionment of benefit between the public good and individual student private reward cannot be easily quantified and therefore the allocation of

cost across university stakeholders (government, public, students, employers, industry) remains contested. If the benefits and costs of the entrepreneurial university are severely misaligned, moral consequential legitimacy will be at risk.

Secondly, Sporn (2001) identifies the near universal political acceptance of neoliberal economic philosophy during the 1980s and 1990s has reduced the influence of the state and enabled the shift from public to private provision of higher education services. The shift to private funding has enabled increased university participation, but decreased actual funding per capita by the imposition of tuition fees (Johnstone and Marcucci, 2010). Governments have sought to de-regulate the university sector and allow new organisations to provide higher education services (Ball, 2012). Governments have leveraged privatisation by not only allowing private providers of educational services but also by making components of quality assurance a non-government responsibility (e.g. performance league tables) (DiMartino and Scott, 2012). Whilst private providers may reduce the financial burden of the state it is argued that private provision will likely increase social and economic inequalities as those with the most wealth can secure the best provision (Valenzuela et al., 2014). The legitimacy of the university may be at risk if the public and other university stakeholders feel that entrepreneurial universities are no longer effectively governed through national state mechanisms and are able to prioritise the pursuit of non-public good objectives.

Thirdly, Sporn (2001) identifies that national demographics are changing. The population is ageing, retiring later and enjoying a longer working lifetime. This often encompasses multiple changes of career and the need for further education and learning. Keller (2001) argues universities will face conflicting issues due to demographical change. Reduction in birth rates may decrease the number of students going to university, but population migration and the upsurge in people wanting to study overseas may heighten demand. Also, significant demographic changes to student bodies are likely to include age, ethnicity, socioeconomic-background and the increasing number of part-time students (Grawe, 2018).

Fourthly, Sporn (2001) argues new technology and communication capabilities have changed everyday practices and accelerated knowledge-based socioeconomic development. The delivery of a university education may no longer be limited to a specific physical location. Student access and participation may become unconstrained other than access to a PC and an internet-connection (Walker et al., 2012). The production cost of a university education may be considerably reduced. However, Cramer et al. (2007) argue this may create issues in pricing and

differentiation between on-site and on-line delivery of higher education services. Also, issues related to the quality of university teaching and the protection of intellectual property rights may arise through increased open access (Margaryan et al., 2015). Finally, the quality assurance of university inputs (e.g. teaching quality) will need to be balanced with student outcomes if university reputation is to be preserved. For example, the graduate salary premium may diminish if employers perceive the quality of students with a university education is falling (Walker and Zhu, 2013).

Finally, Sporn (2001) identifies the globalisation of higher education, influenced by inter-governmental institutions and cross border forms of governance (King, 2009), has encouraged the mobility of students and created an international market for university services. This has seen the rapid expansion of students studying abroad and created new opportunities to increase tuition fee income for those university systems with enviable international reputations and capabilities (Ross, 2009). However, the integration of international students alongside domestic students may make it increasingly difficult to engineer and monitor national policies leveraging university access to target social mobility and the equalisation of “educational opportunities between social groups” (Marginson, 2006: 904). The proliferation of fee paying overseas students may deny domestic students access to their preferred university with implications for pragmatic exchange legitimacy.

Sporn (2001) argues that in the face of cross-national dynamics the university will be forced to adapt the shape of its organisation (including governance, management and internal processes) to resolve any misalignments arising between it and the environment. However, the process of adaption still allows for some agency as the university can establish capabilities such as leadership commitment, an entrepreneurial culture, professional management and the definition of a clear mission to optimise its response.

Countering this position Slaughter and Leslie (1997) argue that the university has limited agency in its response to a dynamic environment. Universities encounter external mechanisms and structures triggered by governments treating “higher education policy as a subset of economic policy” (2001: 154) that force universities to develop commercial services (e.g. seeking research revenue and charging student fees to support funding needs). Slaughter and Leslie argue universities have little option because of “reduced state resources” (2001: 155) that leave university leadership to “draw on market ideology to justify their course of action” (2001: 156). Thus, as political authority is centred upon neo-liberal principles, prioritising capital and wealth

accumulation over social objectives, the entrepreneurial university will experience an internal change process creating and embedding a market-focused culture. Like Sporn (2001), Slaughter and Leslie accept culture is critical in this process but rather than see it as something within the gift of the university, they consider it to be structured by external “market-like” mechanisms (2001: 154).

This market-focused culture will provide opportunities and challenges across the entrepreneurial university. As faculties and departments are unique and have different organisational structures and capabilities based on their own requirements and constraints, Slaughter and Leslie (2001: 156) argue a “variance in power” is created allowing some areas of the university to benefit from commercialisation whilst others struggle. This will leave some university departments privileged (e.g. science and engineering) and others undervalued (art and social science). Furthermore, Bratianu and Stanciu argue that the entrepreneurial university is a concept that is “rather fuzzy and cultural dependent” (2010: 133) conflating instrumental economic motives with publically orientated objectives such as a student’s personal development (human capital) and community interests (social capital). As such, the entrepreneurial university may struggle to demonstrate effective moral procedural legitimacy in the manner it executes its responsibilities.

In sum, Sporn (2001) cautions against Clark’s (1998a) agency centric university transformation by arguing for a process of adaption whereby an environment change forces a university response. Adaption balances agency and structure, as the effectiveness of the response is based on the university’s internal capabilities. Conversely, Slaughter and Leslie (1997) argue that the entrepreneurial university has limited agency over its changing environment as neoliberal economic policy forces the university to prioritise economic outcomes over educational outcomes. Thus, the academic literature presents a contested position with regard to the changing external environment and its impact on the entrepreneurial university demonstrating that the dialectic between agency and structure will have important implications for university legitimacy.

2.3.5 Summary: The Emergence of the Entrepreneurial University

Section 2.3 has reviewed the drivers behind the emergence of the entrepreneurial university. In the US the 1980 Bayl-Dole Act was significant but by no means solely responsible for the emergence of the entrepreneurial university (Mowery et al., 2001). Four other factors were identified in the literature review: the commercial exploitation of research; government policy

stimulating entrepreneurialism; internal university transformation; and finally, the changing external environment.

The section on the commercial exploitation of research revealed how difficult it is for universities to bring innovation to the market. Only the elite universities such as MIT and Cambridge seem able to consistently commercialise the fruits of their research through industry partnership, patents and licensing, or self start-up (Wright et al., 2008).

The section on government policy described how the state has stimulated socioeconomic development, introduced university competition and professionalised universities. The literature revealed how policy to increase competition within higher education increased homogeneity as universities adopted research centric strategies (Dill, 2014) and increased administrative bureaucracy (Shattock, 2010b).

The section on internal transformation reviewed the literature espousing the argument for university agency that “actively seeks to innovate in how it goes about its business” (Clark, 1998a). It argued it is the university that is intent on strategic transformation to an entrepreneurial disposition (Etzkowitz, 1983).

The section on the changing external environment argues against the totality of university agency. Sporn (2001) argues the university is forced to be continually adaptive to the external environment. Slaughter and Leslie (1997) take this further arguing that the university has limited agency in the face of market imperatives. Universities don’t face a choice in being entrepreneurial they have to be entrepreneurial to survive (Rae et al., 2012).

And thus, whether by accident or design, the entrepreneurial university emerged. The final part of this chapter will review the literature defining what an entrepreneurial university *is*. This will help define the scope of the study. The chapter will then close by examining various conceptual models that currently attempt to explain *how* an entrepreneurial university operates. This will identify the theoretical limitations this study hopes to address.

2.4 Defining the Entrepreneurial University

The previous section described the factors driving the emergence of the entrepreneurial university. The existence of the entrepreneurial university is widely accepted, but understanding of what it is and what it does has less consensus (Rae et al., 2012).

This section will review the literature attempting to define what the entrepreneurial university is. The section will firstly consider the different dimensions by which the entrepreneurial university has been defined, before identifying issues and challenges with these definitions. Alternative concepts with overlapping themes will be briefly discussed. A summary pulling together key considerations will be presented leading to a final definition, the author's interpretation, of what the entrepreneurial university is.

2.4.1 *Different Perspectives in Defining the Entrepreneurial University*

The literature review has found that definitions of the entrepreneurial university focus on different aspects of the university, each bringing a different interpretation that reflects the authors research interest. Three categories of definition were identified. The first category focuses on the outcomes generated by the entrepreneurial university (the instrumental deliverables of achievement). The second category of definition focuses on the capabilities of the entrepreneurial university (the constitutive components of what it is). The third category focuses on the processes of the entrepreneurial university (the performative activity of what it does).

2.4.1.1 Instrumental Definitions

The first grouping of definitions focus on entrepreneurial university outcomes. O'Shea et al. (2004) define the 'entrepreneurial university' as a university that has made a tangible impact on regional prosperity. This is echoed by Etzkowitz (1998) who defines the entrepreneurial university as one with a proven record of enhancing regional development. These definitions emphasise the instrumental and demonstrable need for generalised economic growth.

Introducing responsibility, Caiazza et al. (2017: 1) define the entrepreneurial university as one that "emerges where universities teach, research and contribute to regional development simultaneously". Here the emphasis is on the creation of new commercial enterprises by members of the university faculty and not just a general contribution to economic growth by the

university. However, as the definition targets specific academic departments, the economic imperative becomes questionable, failing to fully reflect the research motives of academics and the growing importance of sustainable innovation networks in targeting social and economic needs. Addressing this weakness, Guerrero et al. (2016) argue that university managers need to build relationships with regional actors to create the right environment that can nurture a university's entrepreneurial activity. Entrepreneurialism means more than just creating enterprises, it is about creating the environment where entrepreneurialism can grow, where academics and students have the skills and confidence to "thrive in the emerging entrepreneurial society" (Guerrero et al., 2016: 118).

Developing this and recognising society is becoming increasingly knowledge-based, Laukkanen (2000) argues that an entrepreneurial university is one with a central role in the creation, distribution and understanding of knowledge and as such is a critical element of the knowledge based economy. Finally, building on the importance of the knowledge society, Audretsch (2014) argues the entrepreneurial university's role is much broader than just the creation and distribution of knowledge, and that additionally, it should provide thinking, leadership and action that enhances the entrepreneurial capital of the knowledge society, enabling all of society's citizens to thrive.

2.4.1.2 Constitutive Definitions

The second group of definitions focus on the capabilities of the university. Yusof and Jain consider the entrepreneurial university to be a broad concept with "organisational characteristics of structure, leadership, control systems, human resource systems and culture" (Yusof and Jain, 2010: 89). Kirby (2006) emphasises the critical constitutive element of an entrepreneurial university is culture: "that enables academics and students to commercialise their intellectual property and inventions" arguing a culture based on enterprise creates a framework to identify and evaluate those strategic actions required for university success. Sporn (2001) supports the view emphasising the importance of culture, but argues that an entrepreneurial culture must stress the need for individual responsibility and the rewarding of creativity. Bronstein and Reihlen argue that an entrepreneurial culture must be prevalent and congruent across all departments, levels and roles of the university, embracing enterprise and displaying behaviours that are "underpinned by entrepreneurial values and belief" (Bronstein and Reihlen, 2014: 247). It is not sufficient to pay lip service to entrepreneurialism.

Supporting this, Gjerding et al. (2006) argue that culture is an element of an overall governance capability, defining the entrepreneurial university as an institution: with strong decision making governance allowing it to quickly leverage opportunities; having strong technical expertise in specific areas leading to innovative research; having strong financial resources that are able to cover losses and manage the risks of unsuccessful enterprise; having a management structure reflecting an entrepreneurial disposition; and finally, where both staff and students have a strong entrepreneurial mindset. This echoes an early interpretation of the entrepreneurial university, that combines outcome and capability criteria into its definition, arguing the entrepreneurial university is one that has sufficient management governance to make strategic decisions with the objective of securing autonomy from external challenges and policy influences (Etzkowitz, 1983).

2.4.1.3 Performative Definitions

The third group of definitions focus on the processes of the university. In a seminal definition, (Clark, 1998a) emphasises the entrepreneurial university's ability to innovate how they deliver their core missions (teaching, research, socioeconomic development) so being more resilient to external pressures. Echoing this, O'Shea et al. (2014) define the entrepreneurial university as one centred on an innovation function (taking an idea through to commercial product), considering it as a single system comprising multiple agents, where university developed research becomes commercially viable. Supporting the innovation function, Etzkowitz identifies the ability to test an idea defining the entrepreneurial university as a "natural incubator" (2003: 112) for new ventures supporting both academics and students in their entrepreneurial ambitions. Alongside innovation, Kirby (2002) recognises the ability to create or recognise entrepreneurial opportunities as essential to being an entrepreneurial university. Feldman emphasises that opportunity recognition is not enough, the entrepreneurial university is one comprising "agents who recognise opportunity, mobilise resources and create value" (Feldman, 2014: 9). Here the emphasis is on opportunity realisation through leveraging resource effectively. Opportunity realisation is a strategic planning activity leading to an on-going process of strategic renewal both inside and outside the university (Brennan and McGowan, 2006).

Other authors stress the importance of interaction alongside innovation. Subotzky (1999) identifies three activities of the entrepreneurial university: they seek closer university-industry partnerships; they negotiate for external funding; they deploy a private sector leadership ethos based on stakeholder management. Etzkowitz describes a model centred on the boundary interactions of the university comprising four phases: interaction, independence, hybridisation

and reciprocity (Etzkowitz, 2013), identifying a tension between maximising short-term returns and investing in future innovation, which acts to constrain the impact of university entrepreneurialism on overall regional development.

Finally, some definitions of the entrepreneurial university look to identify specific activities. Williams limits the definition of the entrepreneurial university to purely “a seller of services in the knowledge industry” (Williams, 2003b: 14). Philpott et al. introduce the idea of “a spectrum of entrepreneurial activity” (2011: 162) ranging from hard activities such as the creation of technology parks facilitating university/industry collaboration, to soft activities, such as academic consulting and the publication of academic research. Similarly, in their definition, Jacob et al. (2003) separate out university commercialisation activities such as consulting and private research, from commoditisation activity such as establishing spin-offs, patents and licensing.

2.4.2 Challenges in Defining the Entrepreneurial University

As evidenced by the breadth of the literature review, there exists a broad scope of analysis relating to the entrepreneurial university. It is surprising therefore that a universally accepted definition of the ‘entrepreneurial university’ has yet to emerge (Yusof and Jain, 2010). Some argue the term has become a truism (Shattock, 2008), abstracted to such an extent and in part socially constructed, its repeated use throughout various literature risks it becoming a social convention, rather than a theoretically robust concept (Bronstein and Reihlen, 2014).

One of the central challenges in the literature is the conflation of entrepreneurship as a set of character traits (adaptability, creativity, enthusiasm, risk taking) and as a process of innovation (opportunity analysis, risk management, implementation planning) creating confusion between individual and institutional based theories (Kott et al., 2015). A second issue relates to the interpretation of what entrepreneurialism represents in different geographic regions. For example, in the US entrepreneurialism is viewed as a characteristic of big business and an underlying driver of the economy, whilst in the UK and Europe entrepreneurialism is often seen as an individual trait, relating to the sole trader or self employed and a descriptor of ‘small to medium enterprise’ (SME) (Potter, 2008). Rinne and Koivula (2005) argue that entrepreneurialism is a contested concept and evermore so in the context of the university as different stakeholders have different priorities: government may want a lever for socioeconomic development; university management autonomy and financial independence; academics to

further knowledge; industry might seek commercial innovation potential; students may wish employability.

Language is also an issue. The 'commodification' or 'marketisation' of higher education has been conflated with the concept of the entrepreneurial university leading to inadequate definitions of what the entrepreneurial university represents and research that is poorly focused (Philpott et al., 2011). Different terminology representing concepts that are insufficiently differentiated is problematic. The entrepreneurial university has been contrasted with university entrepreneurship (Sam and Van Der Sijde, 2014), with academic entrepreneurship (Siegel and Wright, 2015), academic engagement (Perkmann et al., 2013) and to a lesser extent, technology transfer (Yusof and Jain, 2010).

The final challenge in defining what the entrepreneurial university is relates to its role within the world. Although there is wide consensus as to the pressures faced by today's universities, Taylor (2012) argues there is disagreement about the purpose of a university in a rapidly changing society. Should it target private or public objectives? Should it be a local, national or global entity? How should it balance theoretical discovery against applied problem solving?

2.4.3 Alternatives to the Entrepreneurial University

The literature review has identified several concepts bearing a close relationship to the concept of the entrepreneurial university. The following section differentiates between these related ideas to avoid the risk of conflation or misinterpretation.

Certain definitions focus on the acts of the individual rather than the institution. Academic entrepreneurship has been defined as the specific creation of new business ventures by any university agent (Chrisman et al., 1995). Whereas Klofsten and Jones-Evans define academic entrepreneurship as any entrepreneurial activity that takes place within the university setting or by university agents and may include consulting, contract research, external teaching and patents/licensing (Klofsten and Jones-Evans, 2000). O'Shea et al. (2005) add instrumental motivation (profit seeking) into their definition of 'academic entrepreneurship' describing it as, the activity driven at faculty level by individual academics or research teams with the specific objective of transferring university-developed knowledge and technology into the commercial domain for the purpose of generating profit. Yusof and Jain (2010) expand the responsibility for academic entrepreneurship on to the institution by considering internal organisational change.

They define academic entrepreneurship as the activity that is undertaken by university agents (professors, technicians and students) to exploit opportunities in the knowledge based economy and includes the creation of new organisational entities, but also organisational renewal and transformation within the university system. This allows the relationship between academic entrepreneurship and the entrepreneurial university to be made explicit, by defining the entrepreneurial university as “a university that extensively practices academic entrepreneurship” (Yusof and Jain, 2010: 90).

Some definitions focus on specific organisational functions within the university. Yusof and Jain (2010) define technology transfer as the discrete process that leads directly and solely to the creation of new organisational entities. Hence, technology transfer represents an organisational responsibility within the university tasked with turning university research into a commercial entity. Echoing this, Dill (1995) argues technology transfer must be discrete from other core university missions (teaching, research) to avoid potential conflicts of interest. This has led to the formulation of the Technology Transfer Office concept, being defined as an organisational function that connects university developed technology to external industry for economic exploitation (Friedman and Silberman, 2003). Technology Transfers Offices are defined as an ‘intermediary’ to connect those involved in university research to organisations with the capabilities to commercialise emergent university knowledge and innovation (e.g. firms, entrepreneurs, venture capitalists) (Link et al., 2015). The independence and motivation of an intermediary will have implications for university legitimacy: do they serve the interests of the university or industry?

Finally, the outcome or output of activity attempting to commercialise university research is often referred to as a university ‘spin-out’. This is broadly defined as the transfer of technology from a university research area into a newly established external commercial organisation for the purpose of generating economic impact (Rogers et al., 2001). A university ‘spin-out’ may be founded on the movement of the technology or externalised knowledge created in the university to an external entity, or the movement of human capital encapsulating knowledge to an external entity (Casper, 2013).

2.4.4 *Summary: Defining the Entrepreneurial University*

Reviewing the literature attempting to define the entrepreneurial university has revealed three essential components to an effective definition: a clear objective or purpose; a defined approach to delivery; and finally, a statement of outcomes or measures of success.

The first requirement for an effective definition of the entrepreneurial university is a clearly articulated objective or purpose. A common interpretation of the third mission of the university is “entrepreneurship for economic development” (Sam and Van Der Sijde, 2014: 904). However, this fails to account for other possible missions, for example: as a concept of organisational transformation; as a private sector business; as a market-driven system component; as a process of creative destruction and innovation; as an environment for developing entrepreneurial talent; or, as tool of social engineering. Another view of the university’s third mission is understood to be all those university activities that are neither teaching (first mission) nor research (second mission) (Gulbrandsen and Slipersaeter, 2007). However, this interpretation fails to appreciate the difference between a university’s internal structural transformation arising from political and cultural shifts within its increasingly volatile external environment, and a university’s deliberate efforts to act as an entrepreneurial agent (Röpke, 1998). Nelles and Vorley offer a definition for a university’s third mission, declaring it is the university response to environment dynamics stimulating socioeconomic development through “knowledge exchange and partnerships” (Nelles and Vorley, 2011: 342).

The second requirement for an effective definition of the entrepreneurial university is a clearly defined approach to delivery. Yusof and Jain (2010) define the entrepreneurial university as an institution capable of making strategic choices that promote values and have reward systems that inspire academic entrepreneurship. They argue that ‘academic entrepreneurship’ is a subset of, and differentiated from, the concept of the entrepreneurial university, as it is the real activity (e.g. consulting, external project work, contract research) undertaken by departments, faculties and individual academics and students that “occurs within the organisational boundary of the university” (Yusof and Jain, 2010: 90). Hence a contingent, circular relationship is formed whereby a university makes strategic choices to encourage academic entrepreneurship, and the level and intensity of the entrepreneurship generated helps to create a culture to reinforce its entrepreneurial values. This extends the definition of academic entrepreneurship described by O’Shea et al. (2005) in that entrepreneurialism driven at the university level is not solely focused on the exploitation of university Intellectual Property Rights (IPR) for commercial gain, but may lead to internal cultural renewal.

The third requirement for an effective definition of the entrepreneurial university is a clear statement of outcomes. Sam and Van Der Sijde (2014) argue there is a difference between an entrepreneurial university and a university pursuing entrepreneurial activity. Activities that simply increase financial revenue and create greater autonomy for the university do not in themselves make an entrepreneurial university. Only when its entrepreneurial activities create new value, within the university (enhancing both its education and research offering) and within its external environment (collaborating with external stakeholders to create new knowledge), can the university be considered to be entrepreneurial. This avoids the risk that external entrepreneurial activity may succeed to the detriment of the university's core teaching and research responsibilities (Dill, 1995).

Bringing together these components of definition and following the objective-approach-outcome framework, the following definition for an entrepreneurial university is proposed:

An entrepreneurial university is one with a primary objective to continually respond to its dynamic environment in order to stimulate socioeconomic development, by adopting an approach based on, and recognising the dependency between, strategic action and internal cultural renewal. Its objective is to create positive external outcomes whilst maintaining the quality and value of university teaching and research.

The definition highlights an important question: is the strategic action and contingent entrepreneurial culture of a university sufficient to maintain its legitimacy, or does the dynamic and often volatile external environment contain structural forces that cause and shape a university's legitimacy? This tension between agency and structure will be explored in later chapters.

This section has reviewed definitions and descriptions of the 'entrepreneurial university' that have appeared across the multiple literatures in order to derive a single, consolidated definition. This definition will be used to scope and frame the analysis phase of this dissertation. The next section will explore how the entrepreneurial university operates by reviewing leading conceptual frameworks appearing in the literature.

2.5 Conceptual Frameworks Explaining Entrepreneurial University Behaviour

An increasingly entrepreneurial society is driving economic growth and job creation through knowledge based enterprise and is facilitated by universities acting as a “knowledge producer and disseminating institution” (Guerrero and Urbano, 2012: 43). However, there is limited understanding of how the university interrelates to its environment and the impact this has on the capabilities and resources shaping the university’s entrepreneurial configuration. This limited understanding has constrained the development of a robust theoretical framework and is reflective of the “embryonic nature of the topic field” (Guerrero and Urbano, 2012: 43).

Theoretical frameworks attempt to explain how things work. The following section briefly reviews four frameworks theorising the operation and behaviour of the entrepreneurial university. In doing so, the key limitations of each model will be identified, highlighting the areas a new conceptual framework for entrepreneurial university legitimacy should seek to address.

2.5.1 *Literature Synthesis Conceptual Model*

Rothaermel et al. (2007) present a framework inductively derived from a synthesis of the entrepreneurship literature. They present a layered model with its inner foundation describing the internal attributes of the university and moving outward through technology transfer offices and new firm creation, before finally reaching the external environment and networks of innovation. The entrepreneurial university sits “in the heart of the overall university innovation system ... that generates technology advances and facilitates the technology diffusion process” (2007: 707). Being based on an in-depth review of literature, the framework identifies many components and reflects the complexity of the entrepreneurial university ecosystem. It argues strongly for the multidisciplinary nature of the Entrepreneurial University that encompasses disciplines including strategic management, economics and sociology.

However, the model fails to articulate how the four layers (entrepreneurial university, technology transfer offices, new firm creation and networks of innovation) interrelate. The interaction between the layers of the model remains under analysed and as such the model fails to explain the propensity of a university to be entrepreneurial, other than recognising the importance of the environment and associated contextual conditions in which the university sits.

2.5.2 *Entrepreneurial Architecture Conceptual Model*

Nelles and Vorley (2011) attempt to bring together two discrete literatures (University Entrepreneurship and Entrepreneurial University) to form a coherent conceptual framework that attempts to explain what is driving the internal configuration of universities encountering the entrepreneurial turn. Building on the Entrepreneurial Architecture framework described by (Burns, 2008) they identify five dimensions: structure; systems; strategy; leadership; and culture; to theorise how internal relationships within the university are influenced by both broad political changes to education policy and institutional changes within the university. They posit a university has single, discrete entrepreneurial architecture encompassing its three missions.

Nelles and Vorley (2011) argue the literature on the 'entrepreneurial university' is predominantly theoretical and case study based, resulting in overly descriptive modelling and a broad view of the university that fails to reflect each university's unique characteristics. Conversely, literature analysing 'university entrepreneurialism' is narrow in focus, empirically founded identifying specific characteristics and structures (organisational functions) such as technology transfer offices and processes related to licensing and patenting. The Entrepreneurial Architecture framework attempts to bring together these two different components of the university to provide a more "comprehensive analysis of the internal dynamics of organisational and entrepreneurial evolution" (2011: 351)

Entrepreneurial Architecture faces several challenges. Firstly, each element of the architecture must be "practically adapted within the unique contextual environment of each university" (Nelles and Vorley, 2011: 351). This implies the university has agency over the configuration of its entrepreneurial architecture. Nelles and Vorley accept that external pressures such as policy change have led to the emergence of the entrepreneurial university, but insist that the "third mission needs to be both institutionally specific and institutionally led" (2011: 350). This assumes the university has within its gift the ability to change and thereby under emphasises potential constraints imposed by external structures or mechanisms. Next, Nelles and Vorley's (2011) key finding accepts that the five elements of entrepreneurial architecture are already present, both shaped by and influencing the characteristics of teaching and research at any university. Therefore, understanding the architectural considerations specific to developing an entrepreneurial mission may be difficult. Similarly, the framework is overly focused on the internal dynamic of the university, interpreting external forces as sequential, linear impacts. This

fails to account for the circular relationship between the university's internal configuration and a dynamic external environment of constant social, economic and political change (Etzkowitz, 2015). Finally, the Nelles and Vorley (2011) model is silent on the implications of analytical scale (local, regional, national or global) and how entrepreneurialism is measured, failing to identify the output (entrepreneurial activity generated by the university) or the outcome (the benefit resulting from the entrepreneurial activity of the university) of the Entrepreneurial Architecture framework.

2.5.3 Conceptual Model Based on Institutional Economics and Resource Based View

Guerrero and Urbano (2012) utilise a theoretical model based on Institutional Economics (North, 1990) and the Resource Based View (Wernerfelt, 1984). The model reviews the literature on the entrepreneurial university to identify formal factors (governance, entrepreneurial training etc.) and informal factors (attitudes, role models etc.) related to the university environment described by Institutional Economics (Clark, 1998a, Sporn, 2001, Etzkowitz, 2004, Kirby, 2006, Rothaermel et al., 2007). It identifies internal resource factors (human, financial, physical, commercial) and capability factors (university status, networks etc.) described by the Resource Based View (Rothaermel et al., 2007, O'Shea et al., 2008). The model posits that these factors must be present for the entrepreneurial university to deliver simultaneously its three missions (teaching, research and entrepreneurialism) and hence meet its social development and economic growth objectives. Guerrero and Urbano build on this conceptual model to create a "robust theoretical framework" (2012: 55) by utilising a structural equation model and secondary data to correlate individual environment and internal factors to desired entrepreneurial outcomes (entrepreneurial propensity of the university). They identify that academic and student attitudes are the most important factors driving entrepreneurial propensity and these attitudes are influenced primarily by the availability of role models, reward and recognition systems.

However, the framework has several weaknesses. Firstly, being based on institutional and resource-based models, internal factors, whether formal or informal, are overly emphasised above external factors. The ability of a university to be entrepreneurial is dependent on the university's ability to create appropriate internal structures and processes to facilitate successful entrepreneurialism. An alternative view locates entrepreneurialism above the institution of the university, where entrepreneurialism is not what the university does, but what it fosters in the wider economy and/or society. Later, Guerrero-Cano et al. (2006: 18) do refer to "environmental conditions" (government policy, economic conditions, social norms and the effects of

globalisation on higher education) but fail to specify how these factors influence the university (for example, do they change internal organisation configuration or merely the university's goals?). Secondly, the factors of the model were identified from a review of entrepreneurial university literature and therefore act to reify existing constructs. The model utilises components that best fit institutional economic and resource based models (e.g. strengthened steering core as a formal environment factor). This neglects to consider theoretical gaps such as the need for risk management to assess the innovation outputs of the university, or the role of ethics in entrepreneurial governance.

2.5.4 Triple Helix Conceptual Model

Etzkowitz and Leydesdorff argue that interactions between institutions across government, industry and academia, “the triple helix” (2000: 109), create or induce new forms of economic activity and innovation, often leading to the formation of new organisations and opportunities to increase economic prosperity. The model echoes the relational view perspective of a network collaboration between university, industry and government within a single marketplace that creates “hybrid organisation” structures focused on reducing transaction costs (Hayter, 2013a: 10). The effectiveness of these collaborations is contingent on the internal technology and management capability of each collaborating agent or firm. The characteristics of the network are continually changing as new agents/firms with new ideas enter the marketplace and competition between them leads to innovation, new strategy and further internal restructuring. The model has several characteristics. It is neither ‘market pull’ or ‘technology push’ but rather a dynamic configuration requiring continual investment in time and effort (Etzkowitz, 2003). The model concerns not only the relationship between actors but also the internal organisational transformations that occur to facilitate the relationships. The relationships are based on the “expectation of profits” (Etzkowitz and Leydesdorff, 2000: 118) although what constitutes profit may differ between actors. Also, the nature of government is not restricted to national institutions, transnational bodies such as the European Union may be a collaborator. As the model is a dynamic system, equilibrium will never be achieved, driven by the competitive tensions between actors. Finally, the different external strands of the helix (government, industry, academia) communicate recursively, each time adapting to what has been learnt, constraining the speed of external transformation (relationships and contracts between actors). This constraint does not apply to internal transformation.

Miller et al. (2016) identify several criticisms of the triple helix model related to knowledge transfer. Firstly, knowledge transfer may be constrained if barriers exist between stakeholders due to differences in culture, language, working methods and tools. These barriers may limit mutual understanding and prevent trusted relationships from developing. This introduces the need for intermediaries to connect and arbitrate between stakeholders. Similarly, knowledge transfer may be constrained if there are power imbalances in the relationships between partners. This will lead to the 'under powered' partners creating risk mitigation strategies to avoid possible exploitation, which at best introduce unnecessary transaction costs and at worst, break down the trust critical to collaboration. Thirdly, knowledge transfer may be constrained if academics are under pressure to pursue goals other than knowledge transfer, such as teaching and research. University administrators need to ensure that balanced performance measures are implemented to ensure that conflicts of interest between competing goals are managed effectively. To overcome these issues, Miller et al. (2016) argues for a fourth helix to extend the triple helix model (Etzkowitz and Leydesdorff, 2000) incorporating the end user of knowledge as a core stakeholder within an 'open innovation' environment.

Finally, Lawler (2011) argues the transfer of knowledge and innovation via triple helix configurations between the university, external industry and government, for the purpose of economic exploitation, has failed to deliver the expected benefits in terms of regional job growth or a positive impact on productivity. Lawler argues the triple helix model sets up a supply side dialogue (between the university, industry and government) that acts to further internalise knowledge with focus falling on the characteristics of the resulting product and/or innovation, rather than how the product and/or innovation could be used.

2.5.5 Summary: Conceptual Frameworks

Four conceptual models of the entrepreneurial university have been reviewed. The models were chosen based on their frequent citation counts across the literature and because they were grounded in different theoretical assumptions. Rothaermel et al. (2007) derive a framework based on a comprehensive review of the literature to ascertain common themes, providing a taxonomic perspective. Nelles and Vorley (2011) utilise an internally focused Enterprise Architecture model to reconcile how a university is organisationally configured, against the actions of individual academics and departments. Guerrero and Urbano (2012) utilise both 'institutional economic' and 'resource based view' perspectives to understand what internal capabilities contribute most significantly to the entrepreneurial propensity of the university.

Finally, Etzkowitz and Leydesdorff (2000) show how the interaction between university, state and industry can create a dynamic environment capable of producing new external entities and driving internal transformation.

Despite being grounded in different theoretical principles the four models reviewed fail to provide a holistic explanation, encompassing internal and external factors, for the entrepreneurial inclination of the university. Identified issues include: the failure to explain the interoperability of entrepreneurial functions within the university; underestimating the causal affect of the external environment; and the failure to theorise knowledge exchange between the university and its region. Addressing these challenges will be critical if we are to understand the causal relationships between the entrepreneurial university and its legitimacy. The remainder of this doctoral thesis will attempt to address such limitations.

2.6 Conclusion of the Literature Review

The literature review detailed five critical components that will underpin the study. Firstly, it identified a framework for legitimacy. Secondly, it described how historically, universities established legitimacy. Next, it detailed how the entrepreneurial university concept came into being. Then the literature review created a consolidated definition of the entrepreneurial university. Finally, it reviewed prominent theoretical models to explain the functioning and behaviour of entrepreneurial university.

The literature review highlighted that the very broad definitions of the entrepreneurial university have led to multiple interpretations and a differentiated understanding of the concept, especially across economic and academic domains (Shattock, 2005).

Explanations of the entrepreneurial university typically focus on commonality and fail to reflect the unique institutional setting of the university (Bronstein and Reihlen, 2014). Such a broad-bush comprehension is likely to make measuring the effectiveness of the entrepreneurial university difficult, which in turn will impact our understanding of how the entrepreneurial university develops legitimacy.

A significant portion of the entrepreneurial university literature is descriptive and atheoretical (Rothaermel et al., 2007) and is limited by the use of highly generalised data emanating from specific case studies, forming the primary and most common research methodology within the literature (Kirby et al., 2011). Where attempts have been made to develop theory and conceptual frameworks, the analysis generally lacks clear grounding in ontological and epistemological assumptions (Busenitz et al., 2003).

This research study hopes to overcome these limitations by developing a conceptual framework for the entrepreneurial university, specifically focused on legitimacy. The study will be grounded in empirical data (news media reports) representing university stakeholder opinion, a critical determinant of legitimacy. The analysis will utilise a critical realist frame to clearly differentiate ontological and epistemological assumptions. The definition of the entrepreneurial university detailed in section 2.4.4 of the Literature Review will define the scope of the study.

The chapters that follow provide firstly, an overview of the methodology driving the study including an exploration of critical realism and how a novel augmentation of grounded theory provides the methodology basis for investigation. Secondly, a detailed analysis will be provided combining Suchman's legitimacy theory, critical realist philosophical assumptions and a definition of the entrepreneurial university. This will be utilised to create an innovative conceptual framework describing entrepreneurial university legitimacy. Finally, the study closes with a discussion of findings and recommendations for future research.

3 Methodology

3.1 Methodology Introduction

This chapter provides an overview of the research methodology employed by the study. Little research has been undertaken on the relationship between the entrepreneurial university and legitimacy. A 'WorldCat Discovery' journal search in April 2019 returned 932 articles with the phrase "Entrepreneurial University" in the title. A similar search returned only 1 article with the words "Entrepreneurial University" AND "Legitimacy" in the title. Even allowing for the use of alternative terminology to describe the concepts, the dearth of articles indicates an under-analysed subject and hence, an opportunity for research.

The study is significant for two reasons. Firstly, it addresses the need to theorise the relationship between entrepreneurial university behaviour and the consequences for university legitimacy. The research will seek to develop new theory in the form of a conceptual framework linking legitimacy and entrepreneurialism. The choice of research methodology must reflect this objective. Secondly, it is widely recognised that entrepreneurial university research lacks a robust theoretical framework (Guerrero and Urbano, 2012). Being overly reliant on case study analysis has produced research that is predominately descriptive and poorly theorised (Sotiris, 2012). The study will seek to advance existing entrepreneurial university theory by delineation of ontological and epistemic assumptions.

To achieve these objectives, the study is based on a critical realist philosophical position and will leverage grounded theory as its main method. The following chapter details the rationale for these choices and outlines the process/method by which the study will be undertaken. The chapter is structured as follows:

Firstly, a description of critical realism will be presented, followed by a critique grounded in critical realism of the methodological issues relating to entrepreneurial university research. Secondly, taking account of these methodological issues, the rationale for selecting a methodology compatible with critical realism will be detailed. The third section will outline the

research design including data collection, the process of analysis and any research instruments to be utilised. The chapter will close by describing how the research will be tested for robustness.

3.2 Critical Realism

All social science research is influenced by the philosophical beliefs of the researcher embodied in their epistemological position. Crotty (1998) details three central epistemological positions: objectivism where an object has real existence and independent meaning outside the human conscious experiencing the object; subjectivism where objects have no meaning until the human conscious (the subject) creates meaning; and finally constructivism, where meaning is made (constructed) by the interaction between object and subject. Based on their preferred epistemological position, the researcher selects an appropriate theoretical perspective to ground their research (e.g. positivism (post-positivism), interpretivism (symbolic interaction, phenomenology, hermeneutics), critical inquiry, structuralism, or post-modernism.)

Researchers may adopt different theoretical perspectives and may even fuse perspectives within a single piece of research (Mertens, 2009). However, the epistemological position should be delineated in order to demonstrate the knowledge espoused is “adequate and legitimate” (Maynard, 1994: 10). Critical realism is a philosophical position that fuses positivism, interpretivism and critical inquiry.

Critical realism adopts a positivist ontology asserting the world is comprised of real objects that have independent existence, regardless of the relationship between it (the object) and any interested or uninterested subject. As Sayer argues:

“The real world breaks through and sometimes destroys the complex stories we create in order to understand and explain the situations we research” (1992: 120).

Things exist, whether seen or unseen, that impact reality and cause events to occur. Whether we are able to prove or not the existence of these things is unimportant, as they cause people to act in a certain way regardless. The ability to understand or interpret the consequence of an event doesn’t change the consequence itself.

Recognising the need to explain events, critical realism asserts that explanations are fallible and open to different interpretation. Critical realism adopts a relativist epistemic position accepting

that knowledge and the understanding of things, is reliant on context, history, the personal knowledge of the researcher and the interaction between object and subject. If these factors change, understanding may also change (Bhaskar, 1978).

Critical realism cautions against the linear accumulation of knowledge searching for order in the world, as espoused by positivism, favouring competition for explanatory power between theories focused on the causes of change (Delanty, 1997). Accordingly, a critical realist is situated between the positivist stance where the researcher is independent of the research object and operates as an “ideal universal knower” (Usher, 1996: 12) and the position argued by Gadamer (1975) where the researcher’s subjective, experiential involvement influences the research approach and outcome. As such, the critical realist accepts an element of constructionism, where realism and idealism dialectically combine (Adorno and Horkheimer, 1997).

In clearly separating out ontology and epistemology, critical realism creates a stratified representation of the world comprising entities, events, experiences and causal mechanisms (Fleetwood, 2004).

Entities are the “objects that characterise the phenomena being studied” (Easton, 2010: 123) and may be linked by mechanisms that have causal powers and liabilities that make things happen. These ‘causal’ mechanisms or structures can take two forms. Firstly, they can relate to an ensemble of individual objects whose interrelationships create a unified single object that has structure (a set of things). Secondly, an object may have emergent properties, changing over time, that are different from any properties of the internal components that make up the object (properties of a whole). Thus, structure within critical realism “usually refers to both the internal organisation of something and to the relations between that thing’s parts that make it work/act the way it typically does” (Olsen, 2010: 8). Causal mechanisms can be applied to entities, but also exist in their own right (Bhaskar, 1998). Critical realism situates entities and causal mechanisms within an ontological framework existing of three layers or domains (Fleetwood, 2005).

The first layer is the ‘empirical domain’ where personal experience is located. This captures an individual’s understanding and perception of the events they see or anticipate. The next layer is the ‘actual domain’ where events happen or are invoked. Events do not have to be experienced to be deemed to have occurred, they may happen independently of witnesses. The final layer is the underlying ‘real domain’ comprising those structures and generating mechanisms that cause events to happen.

A person's empirical experience of an event serves only as the starting point to understanding what is really happening. Critical realists seek to relate the 'empirical', 'actual' and 'real' domains through "vertical explanations which link events and experiences to their underlying causal mechanisms rather than their antecedent events and experiences" (Oliver, 2011: 5). Hence, critical realists assert that patterns in observations do not signify causality and conversely, the lack of pattern does not necessarily mean there is no causality (Sayer, 1992). The risk exists that a false causation may occur when researchers target regularly occurring patterns to justify the correlation of variables. As Sayer argues "what causes something to happen has nothing to do with the number of times we observed it happening" (2000: 14). Focusing on the commonalities of a sequence of events fails to identify the complex and changeable conditions in which events are actualised. Critical realists develop the idea of causality further by defining 'natural necessity' as the condition where one object is part of another object and thereby gives an impression of causality when none might exist. Conversely, 'contingent causality' occurs when an object's causal power can be interrupted by another object (Lawson, 1999). Finally, critical realism espouses 'emergence' where the interaction of multiple entities and objects generate "new phenomena with properties irreducible to its constituents" (Sayer, 2000: 12) emphasising a causal power's dependency of on the environment and context in which it is situated.

To summarise, critical realists argue that the simplified, assumption-laden, empirical models of positivist research fail to provide the ontological depth required to portray the complexity of the world around us. Conversely they criticise post-modernists for negating the influence of ontological structure in the happenstance of events and individual action. Instead, critical realism seeks to explore real world complexity by rejecting the positivist need for closed-system reductionism (Campbell and Stanley, 1963) preferring to see the world as a complex open system, where the influence and behaviour of structures and their associated causal mechanisms are capable of invoking events, embodied across three domains of a stratified ontology.

The next section reconsiders the key findings of the entrepreneurial university literature review, detailed in the previous chapter, against a critical realist perspective and the three-domain model.

3.3 Critical Realism and the Entrepreneurial University

Critical realists propose an ontology comprising three domains that exist autonomously but may be interconnected, are dynamic and open to subjective interpretation. The richness of detail describing the relationships between entities and structures across the multiple domains of critical realist ontology is called “ontic depth” (Olsen, 2010: 3).

The literature on the entrepreneurial university was observed as having limited ontic depth. This was evidenced in research describing the university’s role in regional development, which focused on identifiable and measurable university contributions such as: patents (Trippel et al., 2015); spin out enterprises (Stam, 2015); and the supply of educated labour (Audretsch et al., 2012) etc.. The analysis often lacked understanding of the impact of social structures and culturally contingent interpretations of the social world (Bourdieu et al., 1991). These include ‘institutional reputation’, ‘public good’, ‘profit motive’, ‘career development’, ‘altruism’, ‘corporate power’, ‘entrepreneurialism’ etc., which enable or constrain events occurring in the ‘actual domain’. For example, by failing to identify the underlying relationships between social structures and university action, research on the university’s regional socioeconomic contribution struggles to identify causal affects (Guerrero et al., 2016). Critical realism resolves this by focusing on “necessity, not regularity” (Sayer, 2000: 16).

Furthermore, when socially constructed concepts were referenced in the literature, they were often endowed (mistakenly) with the capability of agency and hence, were falsely assumed to perform like human actors, capable of making decisions or undertaking activity. For example, ‘globalisation’, ‘academic mobility’ and ‘market competition’ were often cited as driving an increase in ‘entrepreneurialism’ across universities (Taylor, 2012). The conflation of a person’s experience of an event (empirical domain) and the underlying, often unobservable causal mechanisms that influence events (real domain) is a prevalent weakness of much of the literature on the entrepreneurial university. Critical realism seeks to resolve this conflation through its stratified ontology that reduces the risk of confusing the world, with our experience of it, and the failure to recognise that causal powers may exist unexercised.

The conflation of the empirical and real domains across research on the entrepreneurial university is exacerbated by the over use of case study methodology (Naia et al., 2014). For example, the seminal work by Clark (1998a) identifies five pathways for university transformation based on commonalities identified in several case studies. Clark grounds his concept of the university as a public organisation providing a public good, whose entrepreneurial aspirations

serve only its public good purpose (Sotiris, 2012). This blinds him to some of the causes and consequences of competition between universities leading to an overly internalised analysis. Focusing on senior management, Clark neglects other stakeholders, for example the student body (current, future and past) and therefore fails to account for the importance and influence of structures such as cultural diversity. Clark's analysis being predominantly grounded in the empirical domain, allows senior management opinion to dominate, creating an overly reified view of entrepreneurial culture (Finlay, 2004). This ascribes agency to the university as an institution (encapsulated in Clark's 'pathways of transformation') creating the falsehood that the university itself, rather than individuals within the university, can take action.

In sum, underestimating complexity in the entrepreneurial university environment is a common problem in the current literature (Bratianu and Stanciu, 2010). By adopting a critical realist philosophical stance, research on the entrepreneurial university can begin to understand the complex interrelations of the university, its stakeholders, its controlling environmental structures and the events and actions arising. This will help explain why entrepreneurial universities experience diverse results despite adopting similar strategies (Lendel, 2010).

This section has sought to justify the applicability of critical realism for studying the entrepreneurial university. The following section will explore which research methodology best supports research undertaken in the critical realist tradition.

3.4 Critical Realism and Grounded Theory Methodology

The relationship between a researcher's philosophical position and the selection of an appropriate research methodology can be obscure and often confused. This may result from: an incompatibility between philosophical position and method (Crotty, 1998); poorly defined and understood philosophical positions (Scott, 2000); or concealment, deliberate or otherwise, of the philosophical position of the researcher (Walsh, 1993). It is therefore important that the choice of research methodology clearly reflects the researcher's philosophical values and beliefs.

For social science, methodology is typically derived from one of three discreet philosophical positions: positivist, constructivist or critical. This presents a challenge for critical realists whose philosophical outlook merges those three discreet positions. As argued by Yeung, critical realism is a "philosophy in search of a method" (1997: 51).

Critical realism argues the world is based on objective reality existing independently of the conscious mind that wishes to understand it. However, descriptions and understanding of this reality will be constructed through discourse, social interaction and be time and place contingent. As interaction and context often change, understanding of social reality will remain a dynamic construct and knowledge related to it, provisional and open to question. As such, critical realists require a research methodology that delineates 'being in the world', from 'understanding of the world', searching for positivist evidence of reality, external to the human mind whilst accepting that making meaning of this reality will be socially constructed and open to interpretation. This addresses a key limitation of research on the entrepreneurial university that conflates ontological and epistemic positions. Entrepreneurial university literature is often case study driven and overly descriptive in character, leading to theories that are poorly grounded and lack empirical rigor (Busenitz et al., 2003). By adopting a critical realist perspective, the researcher hopes to separate out ontological findings from epistemic explanations, fact from hypothesis, practice from theory. To achieve this, the methodology should provide theoretical explanations for university entrepreneurial behaviour and legitimacy that can be identified and aligned to a critical realist stratified model of the world that delineates experience, events and causes. Grounded theory has been selected as a methodology capable of supporting the principles of critical realism.

Grounded theory as originally presented by Glaser and Strauss (1967) provides a method for developing theory from data (inductive reasoning) rather than proving a stated hypothesis through empirical testing (deductive reasoning). The original intention of grounded theory was to develop new, emergent theory through a systematic process that accepts an objective reality. Conceptual themes identified during the analysis should be grounded solely in the specific data being analysed and not in existing theory or knowledge. The researcher must be careful not to introduce existing theory or personal understanding into the analysis. The goal was 'the discovery of theory from data' (Glaser and Strauss, 1967: 1) where the researcher exposes what is already present in a world defined objectively. The researcher is positioned as a neutral observer. Consequently, grounded theory is sometimes seen as an overly positivist, empirically dependent approach and has been criticised by critical realists as such (Danermark et al., 2005).

Despite these reservations, grounded theory has evolved beyond its positivist origins to operate across different ontological and epistemic paradigms. Consequently, the researcher argues that grounded theory now provides the functionality required to support the principles of critical realism.

Firstly, grounded theory is able to separate out the identification of events from the understanding of these events. Recent developments have seen grounded theory leverage constructivist principles to expose implicit understanding of events through hermeneutical means (Charmaz, 2006). Grounded theory has been criticised as an overly positivist method, where theories are grounded in objective data. Instead, Charmaz (2000) argues that theories are constructed by the interaction of a researcher with their data. The researcher's pre-existing knowledge, philosophical outlook and personal values, combine with the data to shape the findings of the research and consequently the construction of new, emergent theories. Therefore, constructed theories represent a distinctive perspective of the data (unique to the researcher) and not a definitive representation of truth. The constructivist bent embodied in grounded theory emphasises the critical realist requirement for culturally contingent interpretations of an objectively positioned social world (Bourdieu et al., 1991) separating the event, from understanding of the event.

Secondly, grounded theory allows existing theories to be re-conceptualised supporting the critical realist principle that knowledge is transient and fallible, allowing the researcher to develop new understandings and multiple interpretations of events and their potential causes. A criticism of the original grounded theory concerned the reliance on induction for analysis and the inability of the researcher to apply their preconceived categories of meaning into the research. By adopting a purely inductive approach to analysis, grounded theory risks forcing data into the narrow conceptual frameworks that are emerging, rather than understanding if the data applies to other conceptual theories or mechanisms capable of explaining the observed events. This can be overcome by modifying the process of induction to accommodate a more retroductive approach. This involves testing identified concepts (both emerging and preconceived) against the data to ascertain deductively what makes the concept possible, before returning to an inductive analysis of the data. Effectively the researcher is looking for patterns in the data that support or contradict identified or preconceived theories. This creates an iterative process oscillating between induction and deduction and provides what Sayer describes as "practical adequacy" (2000: 43) whereby emerging theories (critical realist mechanisms) are seen to operate as predicted or can be modified in accordance with coded data.

Next, grounded theory can move beyond its initial focus on individual experience to expose critical structures and causal mechanisms by considering the relationships and contradictions of collective experience (Gibson, 2007). To support critical realism, grounded theory must be

capable of differentiating between structure and agency. Critical realism asserts that individual actions are influenced but not determined by, social structures. Individuals and structures are active in different ontological layers and have different characteristics that grounded theory must be able to identify. Grounded theory is able to move beyond descriptions of activity undertaken by individuals, to capture and code data related to individual beliefs and values that may provide the rationale for past action. Carter and New argue that individual rationale may operate as a “psychological mechanism” (2005: 12) invoking action. Thus understanding commonality and difference, in emerging knowledge (categories in grounded theory) and individual rationale (psychological mechanisms) across groups of individuals may lead to the identification of social mechanisms or in critical realist terms, causal mechanisms of events. Once a mechanism has been identified it is important to understand how the mechanism is made active under different circumstances. Through constant comparative analysis, grounded theory can test categories against different contexts to understand what conditions are required to make a causal mechanism active (Danermark et al., 2005).

Finally, as a data driven methodology, grounded theory allows the critical realist to sample data in multiple formats and to adopt a ‘depth/breadth’ ratio most applicable to the research question. The researcher acts “like a detective ... follows the leads of concepts, never quite certain where they will lead, but always open to what might be uncovered” (Corbin and Strauss, 2008). This allows the critical realist to test conceptual theories (causal mechanisms) against new and existing data until nothing further can be learnt about the mechanism, its explanatory power being related to the quality, quantity and format of the data. Grounded theory allows the researcher to focus on not just what is evident in the data, but also what is absent, hidden or silent and ask the question ‘what makes this so?’ This supports the critical realist requirement for understanding what must be present or absent to activate a causal mechanism. The ability to analyse multiple data sources allows the researcher to triangulate findings and concepts against different data types including interview transcripts, statistical data, policy documents etc. (Denzin, 1970). Additionally, as critical realism and grounded theory view socially constructed objects (such as narrative discourse) as having tangible effects and therefore can be considered as being real, researching how narrative works and its impact, can be considered integral to the understanding of structures and institutions and therefore to identifying where causal power originates (Outhwaite, 1987).

In sum, this section has provided the rationale for selecting grounded theory as the research methodology supporting a critical realist philosophical stance. Grounded theory was selected

because: it allows the researcher to separate out ontology from epistemology; leverages retroduction in the search for cause; differentiates structure from agency; and finally, takes a flexible approach to data allowing the critical realist to research across different ontological domains. The remainder of this section details the research design to be employed including a step-by-step description of the research approach including the identification of data, data analysis and the validation of findings.

3.5 Research Design

The research design is based on grounded theory methodology, which provides for the systematic development of ‘categories of meaning’ from the iterative analysis of data. The method simultaneously collects and analyses data, through a process of data labelling (coding) and the categorisation of coded data. The categories that emerge from the data are said to have meaning in that they describe “relations of similarity and difference” (Dey, 1999: 63). Theory development results from the identification, enhancement and integration of categories. The research design comprises four key functions: data identification and collection; data coding and category identification; comparative category analysis; and finally, theory building and validation.

3.5.1 Data identification and collection

The purpose of this study is to understand how a university’s legitimacy is affected by its entrepreneurial activity. In this context, legitimacy is a socially located concept that represents the opinion of society rather than that of an individual.

The use of one-to-one interviews (structured and semi-structured) as the tool for data collection has been rejected because the representative sample required to approximate ‘university stakeholder opinion’ would be too great when compared to the time and resource availability of the researcher. Instead, the research will leverage already documented accounts of university stakeholder opinion on the university. Grounded theory is well suited to analyse such data as argued by Glaser and Strauss:

“When somebody stands in the library stacks, he is, metaphorically, surrounded by voices begging to be heard. Every book, every magazine article, represents at least one person who is equivalent to the anthropologist’s informant or sociologist’s interviewee” (1967: 63)

The research will be predominantly based on analysis of newspaper articles concerning university activity. It has been long argued that news media is a reasonable reflection of public opinion as the public, lacking the time and resource to develop fully rationalised responses to all social issues, rely heavily on news coverage in shaping their opinion (Lippmann, 2017). The use of media articles to analyse society's understanding of institutional legitimacy is also a well-established research practice (Baum, 1995). The following section elaborates why the use of such data aligns to the objectives of this study.

3.5.1.1 Why is newspaper reporting a reasonable proxy for legitimacy?

To understand the nature of university legitimacy, the study will seek to capture a representative opinion of the entrepreneurial university from those members of society with an interest in the university sector through newspaper articles and higher education news publications.

In section 2.1, legitimacy was described as a “generalised perception” (Suchman, 1995: 574) meaning it represents an aggregation of individual subjective legitimacy judgements creating a collective and objectified resource, that can be considered as *belonging* to the university. The source of legitimacy is therefore the subjective judgement of individuals, both internal and external to the university, that have the *authority* to make legitimacy assessments (Meyer, 1983). In accepting this interpretation of legitimacy this doctoral study limits the sources of legitimacy, by defining authority, as those individuals with an interest in, or an influence over, the university. Therefore, the study utilises a specific and narrow derivative of public opinion as a proxy for legitimacy. This narrow view of public opinion, confined to those individuals broadly described as university stakeholders (i.e. interest in/influence over), will be referred to as ‘university stakeholder opinion’ in the study.

The type of media selected for analysis should be able to reflect university stakeholder opinion. As such, mass media mechanisms such as television, radio, social media and the tabloid press are deemed inappropriate. The researcher's reason for excluding such mass media, is not that mass media will not contain authoritative opinion on the university, rather such opinion may be more difficult to identify and/or qualify, given the limited scope and resource of the study. Instead the study will utilise broadsheet newspapers as its primary data source. Broadsheet newspapers target the National Readership Survey (NRS) ABC1 social demographic most closely aligned to university stakeholders and are “theoretically likely to influence that which they are taken as

measuring” (Deephouse and Suchman, 2008: 56). Hence, coverage of issues concerning university legitimacy may in part, shape university legitimacy.

Legitimacy can be ascertained in several ways when analysing media and news articles. At a population level of analysis, counting the number of media articles relating to a given subject in a given time period, can give an indication of the maturity of a field correlated against public awareness, leading to an assessment of cognitive legitimacy. Media articles reflect the legitimacy endowed by society-at-large. Examples of research deploying this method include studies on legitimacy in the biotechnology sector (Hybels et al., 1994) and legitimacy in the financial industry (Deephouse, 1996). Leveraging media article counts relating to entrepreneurial university behaviours will identify those areas of university stakeholder concern influencing university legitimacy. This will enable the prioritisation of key research themes, focusing research analysis (via grounded theory) on a specific collection of newspaper articles for deeper interrogation. In grounded theory, this represents the application of a coding paradigm to the data, where the coding paradigm guides the researcher in exposing relationships between categories based on pre-existing understanding.

As well as reflecting public opinion, media articles and news reports can also influence public opinion (Deephouse, 1996). By analysing news reports for evidence of how the media looks to influence public opinion and aligning these findings against the critical realist domains of the empirical, actual and real, the researcher will be able to identify potential causal mechanisms for university legitimacy.

3.5.1.2 Why have broadsheet newspapers been chosen for the analysis?

The reputation and audience for any given news media will be a critical determinate in its influence over public opinion (Deephouse, 2000). It is important to understand whose opinion we are interested in when analysing the entrepreneurial university. Perceived university legitimacy is likely to be influenced by stakeholders closer to the university (academics, university management, students, regulatory bodies etc.) rather than the general public (Ressler and Abratt, 2009). Therefore the choice of which news media to analyse should predominantly represent the preferences of university stakeholders. University stakeholders are the legitimacy audience and can be specified as those individuals working in the university sector or those professionals with an immediate interest in the sector. Hence, for its primary data source the study will leverage prestige broadsheet newspapers and university sector news publications.

Additionally, Deephouse and Suchman (2008) argue that prestige media often influence other forms of media in establishing opinion and are regularly targeted by organisations wishing to build legitimacy. There is a direct correlation between broadsheet news coverage and organisational reputation (Deephouse, 2000). Broadsheet newspapers are also more effective at conveying the complex processes and operational detail, required to understand the determinants and implications of legitimacy (Dyck et al., 2008). Broadsheets also typically avoid the populist and sensationalist coverage of the tabloids that risk conflating legitimacy with protest, campaigning and lobbying (Chandler and Munday, 2011). Finally, broadsheet newspapers have a long recognised role as the 'Fourth Estate' of society, where they provide political oversight and provide the impetus for policy and regulation formulation (Brand, 2010). For example on an issue pertinent to the university sector, senior executive pay, Ferri and Maber (2013) argue the broadsheet media was perceived as being instrumental in convincing the government to implement director/executive pay regulation.

Data sourced from broadsheet newspapers is not without challenge. There has been a significant drop in broadsheet newspaper circulation as readers shift to online sources of news (Thurman and Fletcher, 2019). However, this is being redressed as broadsheet newspapers develop their on-line capability and as broadsheet journalists, through use of social media and news feed accounts, increasingly attract on-line readers toward broadsheet content (Schifferees et al., 2014). Additionally, mass media such as TV and the Internet, although capable of reaching a wider audience in a synchronous, timely manner, may not allow for the cognitive appraisal of content required to nurture an assessment of legitimacy (Harmon et al., 2015).

In sum, the use of broadsheet newspapers when analysing organisational legitimacy is an established practice (Baum, 1995) and should provide the representative view of university stakeholders required by the study. It is however recognised that broadsheet newspapers do not have certain capabilities (access, synchronicity) found in other media (e.g. TV, Internet and social media), capabilities that may provide different interpretations of legitimacy. This may offer a future research opportunity and will be discussed further, in the final section of this study.

3.5.1.3 The process for data collection

Predominantly the study will leverage broadsheet newspapers as its main data source. In addition, the Times Higher Education Supplement will be extensively referenced because of its

recognised leadership in the coverage of the UK higher education sector. All sources of data will be accessed via the University of Bristol's Lexis Library News database. This enables an advance search to be made to target specific content using Boolean search techniques. For example the following search logic can be employed:

"Return all articles containing the words 'university' OR 'universities' AND the words 'student fees' between the dates '1/1/2015' – '1/1/2019'"

This will return all articles including full text satisfying the stated search criteria. This data can be downloaded into a text file for analysis. Utilising separate searches, it will be possible to create datasets for analysis focusing on the university's entrepreneurial behaviours affecting legitimacy that were identified in the literature review (vice chancellor remuneration, student debt, student fees, university expansion, university finances etc.). Datasets can be configured to reflect specific date ranges enabling the researcher to analyse how the significance of an issue develops over time, indicated by the frequency of related articles identified in the specific timeframe.

It is recognised that a large volume of data may be generated. An initial search of the Lexus Database returned 1214 articles containing the words 'university' or 'universities' during the calendar year 2018. There is a risk that too much data may impair analysis and it is therefore important that effective data sampling is utilised. Theoretical sampling will be utilised selecting data "according to the descriptive needs of the emerging concepts" (Morse, 2010: 235). In other words, the prevalence of data to the emerging theoretical category will drive data collection. Collection of data will cease once saturation is deemed to have occurred. Saturation is the point at which no further attributes or characteristics of a category are likely to emerge.

3.5.2 *Data coding and category identification*

The process of identifying categories from data is called data coding. Open coding reviews the data (line-by-line) to identify unique, standalone *indicators* of the phenomena to be researched. Once identified, the indicator is then labelled (coded). Reviewing these labels for relationships may then lead to a further level of coding abstraction and labelling. For example, indicators such as 'advisory service fees', 'private tuition fees' and 'training services fees' may be indicators of the concept of 'consultancy charges'.

Data coding leads to the creation of categories, which are the underlying components of grounded theory. A category is a grouping of data instances that share common properties. At the most basic level of abstraction a category may be simply a descriptive label for the data grouping (e.g. 'student fees', 'patent royalties', and 'consultancy charges' may be labelled as the category 'university income'). As the analysis continues, the researcher will "begin to develop a stable view of what is central to the data" (Punch, 2013: 182). This is referred to as 'substantive coding'. As the research progresses a higher level of abstraction develops where categories are related analytically rather than merely described. For example, 'risk propensity', 'need for autonomy' and 'operational costs' could be categorised as 'university profitability drivers'. This is referred to as 'theoretical coding'. Both substantive and theoretical coding categories are developed through the iterative comparison of data looking for similarities and difference (Dey, 1999).

As with all elements of grounded theory, data coding is not a discrete stage, but an iterative form of analysis that moves from description to conceptualisation and is enabled through the theoretical sampling of data (see above) and constant comparison (see below).

3.5.3 Comparative category analysis

This is the continuous analysis of data across and within emerging categories, to understand how the attributes of each category support or contradict the coded data (Holton, 2007). As a result, categories are amended or new categories introduced. This allows the researcher to consolidate categories in larger groupings, but also and possibly more importantly, break down categories into smaller sub-units with more nuanced relationships and meaning. This allows for a complexity in the data to be captured, essential for the critical realistic requirement to avoid the conflation of ontology and epistemology. This progressive analysis continues creating an enriched definition of the relationships between conceptual categories, the synthesis of which represents an emerging theory, grounded in the coded data.

The research will compare the coded data in three ways. Firstly, comparison of all data codes supporting similar instances will be made to increase a code's distinctiveness. Secondly, comparison of instances within a data code will be made focusing on difference and the identification of potential sub-categories. Finally, categories will be linked and integrated so that variations can be captured by an emerging theory (Glaser and Holton, 2004).

Leveraging the key insights from the entrepreneurial university literature review, the researcher will utilise 'axial coding' (preconceived theories or knowledge) to identify patterns in the coded data to make additional connections between categories, resulting in enhancements to existing categories or the emergence of new categories.

3.5.4 Theory building and validation

An important component of grounded theory is 'memo-writing'. Memos are the researchers definitions and rationale for the theoretical categories that emerge and descriptions of the relationships between categories (Lempert, 2007). Memos will be used to capture the reflections of the researcher and as such may become data in themselves or "analysis written on analysis" (Lofland and Lofland, 1995: 195). As grounded theory is an iterative process of theory development, the researcher will use memos (dated and titled) to chart the chronological progress of the research process.

Once a category has been identified the study will seek to find data that not only fits the newly defined category, but also data that does not fit or contradicts the emerging theory. This is a process called 'negative case analysis' and its consideration allows the researcher to extend, enhance and/or alter the emerging theory to reflect the attributes of all data upon which the theory is predicated (Kolb, 2012).

It is hoped that the ultimate product of the study will be the emergence of a 'core category' that joins together all the categories that have emerged into a coherent and rich theory (Glaser, 2002). The core category should help explain the relationship between a university's entrepreneurial behaviour and its legitimacy, grounded in data sourced from media and news articles. For this study, the core category may take the form of a conceptual framework describing the relationship between university legitimacy and entrepreneurialism.

To validate the products of the study a number of considerations must be made.

Firstly, is the research credible? The research relies upon media reporting to provide a consolidated representation of university stakeholder opinion. Consideration of media reports across several years should provide an element of longitudinal analysis. Effective 'theoretical sampling' will be required to provide "representativeness and consistency" (Corbin and Strauss, 1990: 9). This may reduce the scope of research to a subset of university entrepreneurial

behaviour (for example, the research may only be able to consider the impact of Vice Chancellor's pay on university legitimacy). A criticism of grounded theory is that it looks to confirm what is immediately obvious (Layder and Layder, 1993). It will be important to include peer review into the research process to ensure the research protects against this bias (Corbin and Strauss, 1990). In addition to media and news articles, data such as policy documents, university mission statements and press releases should be used to triangulate findings.

Secondly, is the research transferable? It will be important for the study to provide a sufficient description of the context of research data, to enable the reader to ascertain the "linkages" between context and the identified dimensions of university legitimacy (Corbin and Strauss, 1990: 11). To support the generalisation of the research care must be taken to ensure wherever possible the data reflects multiple instances or different contexts, of any given phenomenon. For example, a finding's validity will be generally considered as weak and likely rejected, if examples of an identified behaviour occur only within a single university. Increased external validation will be achieved, implying transferability, if multiple instances of the phenomenon in different contexts can be found in newspaper articles.

Next, is the research dependable and reliable? Grounded theory is a mature, yet complex methodology. Assessing the robustness of the research method will be highly dependent on the quality of 'memos' produced, placing emphasis on the researcher to be highly reflective of both the emerging research findings and the on-going research process (Alvesson and Skoldberg, 2000). The use of newspaper articles retrieved from a standardised archive (Lexus Library) as the primary source of data for the study, should enhance reliability as the criteria for data selection and the outcome of data gathering exhibit a high degree of repeatability (Scott and Morrison, 2006). Also, the permanence of newspaper articles as a source of data should contribute to the reliability of the study as re-analysis can occur without cost or compromise providing the means to re-check or audit research findings (Robson, 1994). This is often impossible in observational case study analysis utilised by many entrepreneurial university studies.

Finally, can the research demonstrate confirmability (control of bias)? The use of grounded theory risks diluting the richness of the original data (media and news reports) by fragmenting the content into the researcher's preferred homogenised labels to facilitate data coding and the definition of categories as demanded by the methodology. James and Thomas (2006) argue this relegates the original voice of the source data, bringing the grounding of research findings into question. To mitigate this Denzin (2008) argues the role of the researcher in grounded theory is

to adopt the standpoint of those being researched. In an attempt to meet this requirement and enhance the confirmability of the research, the researcher hopes to conduct a number of 'validation interviews' with university stakeholders (both management and academic staff) to discuss the overall findings of the research.

3.6 Initial Scoping Analysis

Initial scoping comprised three methodology steps: data capture; open coding; and axial coding. In the initial phase of analysis data was captured solely from the Lexus Library News database, providing access to all news media articles from British daily broadsheet newspapers and their Sunday equivalents (The Times, The Daily Telegraph, The Independent, The Guardian). Captured articles were firstly reviewed to identify open codes, the labelling of article text to summarise initial meaning, followed by axial coding that identified the relationships between open codes.

3.6.1 Data Capture

The Lexus Library News database was used to search and identify appropriate newspaper media articles that would form the basis of the dataset to be analysed. The rationale for using newspaper articles, as the primary dataset, was to understand a spectrum of opinion both within and without the Higher Education sector of the key challenges that may impinge on the long-term legitimacy of the university. As Van Dijk argues of news media: "it is primarily their definition of the situation that contributes to the manufacturing of public opinion" (1995: 28). As news media both reflects and shapes public opinion, it is assumed that the opinions expressed and captured within the dataset, represent an approximation of public understanding as to what are the threats to university legitimacy.

A key issue was the amount of data available on the Lexus database. An initial search of the database for news articles containing the words "university" and/or "universities" with the Industrial Sector flag set to "Educational Services" returned over 712,624 articles. Refining the search to include only articles from the last five years (1/1/2014 to 24/4/2019) returned 216,469 articles. This was too much data to analyse and therefore the search was further refined to use the search terms "university" and/or "universities" and "legitimacy". This returned 197 articles for the period 1/1/2014 to 24/4/2019.

Each of the 197 articles were then captured electronically and quickly reviewed for the appropriateness of content. Articles were rejected if their content did not specifically relate to both the commercial orientation of the university *and* raised issues of university legitimacy.

The rationale for rejecting articles can be summarised as follows:

Table 1 - Legitimacy Search Article Rejection

<i>Reason for rejecting capture news article</i>	<i>No. of articles</i>
<i>BBC Monitoring reports (university commentary on general legitimacy issues)</i>	52
<i>Regional news articles</i>	37
<i>University commentary on the legitimacy of something else (e.g. Trump)</i>	28
<i>Legitimacy of university courses</i>	5
<i>Book reviews on legitimacy</i>	3
<i>The word "legitimacy" appeared in the text (e.g. "the legitimacy of the complaint")</i>	36

The initial sampling of 197 articles led to 161 articles being rejected. This left 36 articles to be analysed in detail.

A second Lexus database search was undertaken for articles containing the word "entrepreneurial" in addition to the words "university" and/or "universities". The 'Industrial Sector' flag was set to "Educational Services" as in the previous search. This returned 2197 articles. Refining the search to include only articles from the last five years (1/1/2014 to 24/4/2019) returned 555 articles. As before, articles were rejected based on applicability. Due to more articles being selected for analysis than search one, a breakdown of publication source was also captured. The rationale for rejecting articles can be summarised as follows:

Table 2 - Entrepreneurial Search Article Rejection

<i>Reason for rejecting capture news article</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>
<i>Article about entrepreneurial students</i>	5	9	2		3	1	1	2	
<i>Article about entrepreneurial awards</i>	1	2		4					
<i>Article about entrepreneurial book reviews</i>	3	3		1	1			1	
<i>Article about an entrepreneurial society</i>		8	7	3					
<i>Article about entrepreneurial courses</i>				2	1				
<i>Article about entrepreneurial hero stories</i>					3				
<i>Article from a none-broadsheet, quality daily</i>									357

(Key: A-Times Educational Supplement; B-Guardian; C-Times; D-Sunday Times; E-Independent; F-Telegraph; G-Sunday Telegraph; H-Observer; I-Other)

The initial sampling of 555 articles led to 420 articles being rejected. This left 135 articles to be analysed in detail.

In sum, reviewing UK quality/broadsheet newspapers over a five-year period has yielded 171 news articles concerning universities containing the words “legitimacy” and/or “entrepreneurial”. This will form the initial dataset for analysis. Following the principles of theoretical sampling additional articles will be identified and captured to further explore the concepts and themes that emerge in the analysis.

3.6.2 Open Coding

The first step to open coding comprised a line-by-line review of all 171 articles forming the initial data sample. Elements of the text that appeared of interest to the researcher were underlined. These underlined segments were then labelled. This was a reflective exercise for the researcher enabled by asking a series of questions:

What phenomenon I am seeing?

What is being done? How?

Who is involved?

Why is this being done? What are the consequences?

Adapted from (Punch, 2013: 181).

This enabled the researcher to think more deeply about the content of the data. At the outset of the process, the researcher found it challenging to think beyond the surface level message of an article. Reflecting on the given questions allowed the researcher to identify and challenge assumptions in the data.

The labels assigned to the data segments reflected answers to the questions being asked. At this initial stage, the researcher wasn't overly concerned by the quality of labelling. It was more important for the researcher to capture the personal meaning of data rather than identify any theoretical insight. Short notes (memos) were made when the labels were insufficient to capture all meaning. The analysis continued by re-reading all articles highlighting recurring topics. Re-reading allowed for tentative connections between labels to be identified. A process of constant

comparison ensued. This allowed the data to be broken down into individual segments that reflected some form of meaning captured in an augmentation of the initial labelling.

This was not an ordered process. It was messy and often chaotic involving scribbled notes in the margins of certain articles, 'post-it note' memo's conveying ideas thought significant at the time and more detailed observations recorded in a formal notebook. As labels were created, informal tools for categorisation emerged (e.g. colour highlights for particular themes). Not all survived.

Examples of these extended labels included:

- Lack of a prescriptive approach to commercialising university research
- Traditional universities teach a breadth of subjects
- Some new universities are providing specialist services
- Universities raise funds from multiple sources
- Universities investing in infrastructure
- Universities opening campuses overseas

The labelling of data segments allowed properties to be identified for the pieces of labelled data (for example, "Universities opening campuses overseas" has properties including "regulatory authority", "business model", "teaching staff accreditation", "campus size".) The labelling of data with its associated properties (or characteristics of the data) constituted the designation of an open code (Corbin and Strauss, 2008). The next step was for the researcher to group together related open codes into categories that reflected some form of relationship between the codes or had some explanatory power. Again constant comparison was utilised searching for properties and relationships between codes and properties that infer some form of conceptualisation of the data. Gaps in the data were also identified at this stage requiring further theoretical sampling (for example, searching for news articles related to "overseas university campus failure"). Descriptions of the relationships between open codes were captured in increasingly detailed memos. At this point, the researcher began to recognise the importance of memos to the process of analysis and the subsequent stage of writing up the research.

Accordingly, the content and structure of memos became more robust. The identification of categories of open codes allowed existing properties to be refined and new properties to be identified. This often raised further questions that required additional theoretical sampling (for example, "what legal issues arose from the increase in overseas students?"). The output of open

coding, the first stage of analysis, was a number of conceptual categories. These categories began to reflect what was important in the data. The category's frequency of occurrence and the depth of description (most densely populated) began to guide the researcher towards an emerging theory. The next stage of analysis developed these categories into a framework, using a process of induction that described the relationships between them.

A key challenge at this point was the researcher's internal need to reconcile what appeared to be conflicting categories in the data. For example, properties of university governance related to academic freedom, autonomy, regulation and quality assurance did not sit comfortably together. The risk to the study was that some findings appearing contradictory, might be de-emphasised too soon, due to the presence of initially stronger or more prominent ideas. Retaining such findings forced the researcher to understand the contradictions in the data and became an important facilitator in the identification of axial codes.

3.6.3 Axial Coding

In the initial phase of analysis (open coding), the researcher effectively fractured the data into individual segments or components each with specific intrinsic logic represented by properties. The next stage of analysis attempted to reconnect the data into more abstract concepts that began to reflect an emergent theory. For example, consider the open codes:

"Student choice impaired by imperfect information"

"University revenue dependant on tuition fee rates"

"Grade inflation devalues university degrees"

"Students increasingly motivated by instrumental economic drivers"

"Students are influenced by university performance league tables"

By searching for patterns in the data through comparison of the identified open codes and their properties, theoretical categories begin to form, for example 'raised student expectations'. A continuing inductive process compares emerging categories. At this point in the analysis, attention is paid to the similarities and differences across the emerging categories. For example, comparing the emerging categories 'raised student expectations' and 'fee based university services' the research found that a monetary value was *similarly* assigned to both university teaching and university outcomes (degree/earnings correlation) whilst competition was viewed *differently* by universities and students (universities focused on competition for students,

students focused on competition for jobs.) Through continued comparative analysis, relationships between emerging categories are identified that infer theoretical explanation and the formation of axial codes. For example, the above analysis eventually concluded in the formation of the axial code:

“The relationship between university and student is transactional.”

Through the formation of axial codes, a theory begins to emerge that connects the properties of the previously identified open codes. In this example, the idea that students buy an education from a university begins to form. University education is viewed as a commodity that can be priced with an associated value or return on investment.

Although the process to develop axial codes is similar to that of open code development in the use of constant comparison, analysis of axial codes will increasingly leverage existing academic literature for comparison. The researcher found that supplementing newspaper media data with additional academic literature provided not only theoretical enrichment, but also an element of triangulation that supported the reliability of the research.

It is recognised that a review of the literature pertaining to the entrepreneurial university, informing the research, is controversial within grounded theory. Glaser (1992) argues that a review of relevant literature will influence the direction of research and constrain the emergence of theory. However, the researcher sides with the opinion of Corbin and Strauss (1990) who argue that an understanding of the literature can enhance theoretical sensitivity. Additionally, due to the nature of the core data (text documents), the researcher considers academic literature on the entrepreneurial university to be a complementary source of data for analysis.

The identification of open and axial codes continued until category saturation was achieved. This is the point at which no further new categories, concepts or themes could be identified. However, the researcher encountered a personal challenge with regard to saturation: When to stop? Theoretical sampling of newspaper articles can proceed indefinitely because news happens everyday. Unlike people based interviews, where the interviewee can be re-questioned until no further valued-responses are forthcoming, newspaper media provided an almost unlimited opportunity for further theoretical sampling.

Instead, theoretical saturation was deemed to have occurred when the emerging axial codes began to provide an explanation for the phenomena being analysed (e.g. university legitimacy). Categories, open codes and axial codes not covered by existing literature (excessive university borrowing etc.) and those indicating a significant influence on university legitimacy (instrumental economic motivation etc.) received “particular attention” as recommended by Gioia et al. (2013: 20). This guided the researcher to those themes of interest and relevance, enhancing theoretical sensitivity.

At the point of category saturation, twelve axial codes were identified that represent the emergence of a theory. The codes identified were:

1. Academic identity will be changed by the marketisation of the university
2. University culture is intrinsically resistant to marketisation
3. University governance will be changed by marketisation
4. The public good purpose of the university is diminished as its commercial activity increases
5. The marketisation of the university sector cannot be stopped
6. The economic model underpinning the market-led university is not sustainable
7. The relationship between the university and student is transactional rather than developmental
8. Competition across the university sector is driving inequality
9. Different universities will have different regional impacts
10. University agents will require effective regional networks to influence regional development
11. A university’s propensity for entrepreneurialism, is influenced by its appetite for risk
12. Knowledge emanating from universities will attract knowledge workers leading to the socioeconomic development of a region

Once category saturation has been achieved and the axial codes identified, a “data structure” can be created (Gehman et al., 2018). The data structure firstly connects all open codes to their consequent axial code, and secondly the data structure represents further “aggregate dimensions” of the identified axial code (Gioia et al., 2013: 20). For example, the axial codes ‘the relationship between the university and student is transactional’ and ‘university governance will be changed by the marketisation of the university sector’ have a further aggregate dimension:

'Interdependent internal and external change'. Thus, the data structure links raw data (encapsulated in open codes) to theoretic themes (axial codes) and theoretic insights (aggregate dimensions) providing methodological rigour (Tracy, 2010).

Once axial codes have been identified in grounded theory analysis, the identification of a core category usually follows. Strauss and Corbin (1990: 116) define the core category as "the central phenomenon around which all the other categories are integrated". However, for the purposes of this study the researcher will maintain a theoretical focus at the axial coding level in an attempt to describe how the identified categories can be integrated to form an abstracted theory that interrelates the entrepreneurial university and legitimacy. The vehicle to integrate the identified axial codes will be a critical realist framework comprising layers of the empirical, actual and real (Fleetwood, 2005).

Each of the identified axial codes represent an emergent theoretical concept that explains the legitimising affects of the entrepreneurial university. As such they can be thought of as propositions that provide "a useful way of transitioning from inductive insights to deductive testing" [Kevin Corley quoted in (Gehman et al., 2018: 297)]. To further deductive testing data was aligned against categories determined by a critical realist framework (e.g. experiences, events and mechanisms) to help validate the proposition (the axial code). Experiences and events were predominantly discovered by reconnecting with the raw data (newspaper reports) via captured open codes and their properties accessed through the data structure. This helped validate the propositional theory of the phenomenon under investigation (university legitimacy). The perceptions of university stakeholders (their experiences) explained the consequences of the phenomenon and the identified events characterised the invoking of the phenomenon. To understand what caused the phenomenon, the identification of causal mechanisms, required not only a deep immersion into the original data but a dialectic detachment that allowed the imagination of researcher to propose and test causal rationale (Klag and Langley, 2013). This was a creative process, driven by further theoretical sampling, that sought alignment or arbitration between raw data (newspaper articles), academic literature and the personal experiences of the researcher. For example, the causal mechanism 'supply-side hegemony of a market-led university sector' combined evidence of stakeholder power imbalances from newspaper articles, with privatisation trends of university services from the literature, with policy insights from the researcher's professional experience.

In combining grounded theory process within a critical realist framework the researcher hopes to extend current knowledge relating to methodology by providing an additional analytical step to grounded theory. This step will enhance grounded theory by separating out ontological findings from epistemic explanation, the event from ones personal experience of the event, which might otherwise have remained conflated by theory formulation. The following chapter describes the detailed analysis that resulted from this novel additional step to grounded theory: alignment to a critical realist framework.

3.7 Summary: Methodology

This chapter has provided an overview of the research methodology to be utilised in the study. It covered four areas: a description of critical realism and a critical realist critique of existing entrepreneurial university literature; the rationale for selecting grounded theory as the study's methodology; an outline of the research design including data collection, analysis and theory building; and finally, issues relating to the validity of the study.

It should be recognised that engagement in the research field might present unforeseen challenges that alter the anticipated research design. The researcher hopes to supplement the research approach with a personal, reflective analysis that captures the logic of decisions taken along the way, thus providing a counter-balance between methodological process and researcher intuition.

The next chapter presents the detailed analysis and findings of the study. In addition to describing what was found, the chapter hopes to bring to life the methodology detailed in this section by initially describing how the analysis was conducted and the challenges the researcher faced. The chapter will then present, for each identified conceptual category, the detailed findings of the grounded theory analysis aligned to a three-domain critical realist model.

4 Findings

The deductive analysis provided either: theoretical validation; or, identified gaps and contradictions in theory that required additional theoretical sampling and an inductive analysis of the data through process of constant comparison. Resulting from this analysis the original twelve axial codes were refined and amended producing eight finalised theoretical categories that form the core findings of this research study. The finalised eight theoretical categories are:

1. The prevalence of marketisation across the university sector
2. The impact of marketisation on university governance
3. The ontological challenge of marketisation on academic identity
4. The economic sustainability of the entrepreneurial university
5. The transactional relationship between university and student
6. The tier effect of university competition
7. The impotence of university regional development contribution
8. The changing purpose of the university

The analysis and findings section describes each of the eight conceptual categories detailing the characteristics of experiences, events and causal mechanisms that may influence the legitimacy of the entrepreneurial university. The findings are aligned against the three domains or layers of a critical realist framework: the empirical domain (experience), the actual domain (events) and the real domain (causal mechanisms).

The identified experiences and events of the first and second critical realist domains are grounded in the data (newspaper media articles and academic literature). The experiences, representing personal perceptions and value judgements are characterised and described through identified *rationales*, the justification for the given perception or opinion. Events, being actual happenings are characterised and described through *properties*, the attributes or features of the event or incident. The characteristics of both identified experiences and events were inductively derived and emerged during a typical application of grounded theory analysis. The data utilised in this stage of the analysis was comprised predominantly of newspaper articles.

However, the causal mechanisms of the third critical realist domain (the real) did *not* emerge from a typical application of grounded theory analysis.

As highlighted above, the causal mechanisms of the critical realist 'real' domain were retroductively derived via a process of "scientific discipline with creative imagination, intuition and guesswork" (Blaikie, 2009: 87). The first stage of this process resulted in the rationalisation of conceptual themes (axial codes) from twelve to eight and the initial identification of *possible explanations* for the identified phenomena (described above). This was followed by an additional retroductive analysis to enrich the theoretical detail of these possible explanations.

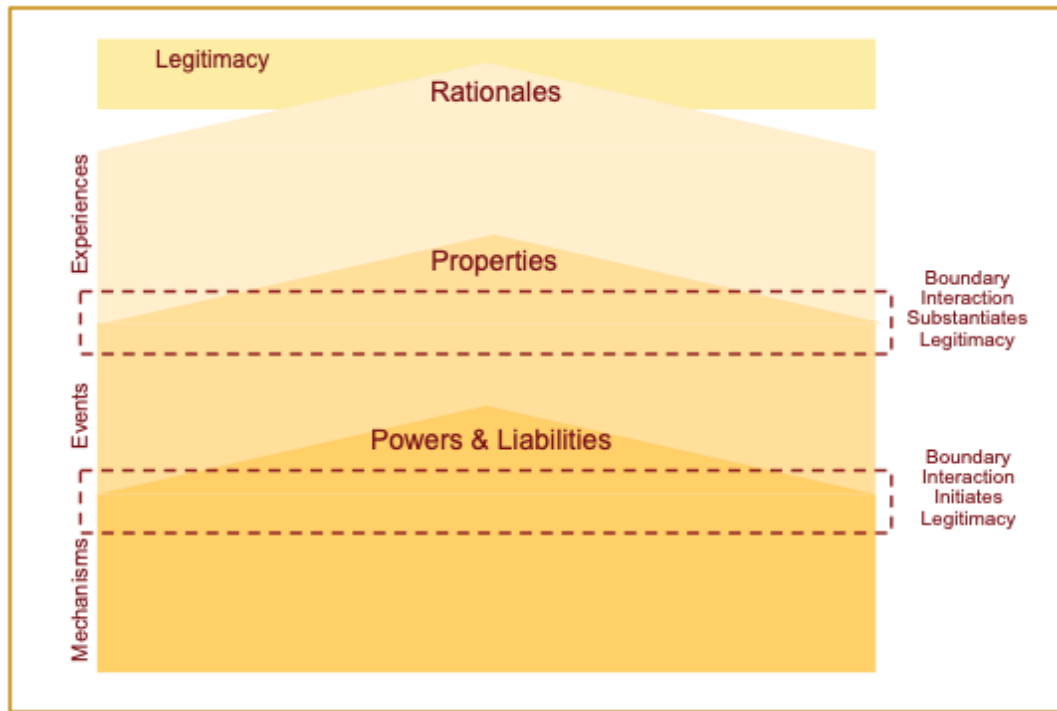
This resulted in the formulation of robust causal mechanisms, the key constituent of the critical realist 'real' domain. The data utilised in the retroductive analysis was comprised predominantly of academic literature.

The identified causal mechanisms look to explain the invocation and presence of the previously identified events and experiences. A causal mechanism is a structure (that can invoke an event or experience) and is therefore characterised and described through its powers and liabilities (to make things happen).

Figure 1 (following page) shows how the powers and liabilities of a given structure within the real domain influence and/or initiate the events of the actual domain creating event properties.

As such, the interaction between the domains of the real and actual is where legitimacy is *seeded* or is initiated. The properties of the real domain are then observed and felt, creating and shaping the experiences of the empirical domain. The interaction of the actual and empirical domains is where legitimacy *grows* or is substantiated.

Figure 1 - Critical Realist Domains



Source: Author's Own

The following section documents the rationale (of experiences in the empirical domain), the properties (of events in the actual domain) and the powers and liabilities (of the causal mechanisms of the real domain) for each of the eight identified conceptual categories.

4.1 The Prevalence of Marketisation Across the University Sector

The first conceptual category described considers the seemingly unequivocal acceptance of the market-led provision of university services. Over the last 30 years societal outcomes have been increasingly influenced by interactions in market-led systems rather than public policy determination.

Wolfgang Streeck referred to this as the emerging dominance of market justice over social justice. Here market priorities such as productivity, output, competition, price and efficiency take priority over social concerns such as fairness, correctness, reciprocity and human rights. Therefore “the redistributive effects of state interventions (aiming at greater social justice) disappear in favour of market justice” (Streeck et al., 2015: 3).

Universities, as institutions traditionally concerned with social outcomes will respond to the conditions of an environment increasingly led by market-justice, in ways that are likely to impinge on the university’s public legitimacy. The following section details the findings of a grounded theory analysis identifying the key conceptual themes that support the premise *‘the university sector is increasingly driven by market justice’*. The themes are aligned against a critical realist framework identifying experiences, events and causal mechanisms (structures).

4.1.1 *The Experience of a Market-led University Sector (Critical Realist Empirical Layer)*

The conceptual category ‘The Prevalence of Marketisation’ relates to the opening up of the university sector to allow new providers of higher education services to compete along side existing universities. A grounded theory analysis of newspaper articles (the data) yielded two critical realist experiences (value judgements or perceptions) relating to the conceptual category that may influence the legitimacy of the entrepreneurial university.

The identified critical realist experiences for ‘The Prevalence of Marketisation’ are: driving university sector innovation; and secondly, offering students more choice and better value.

4.1.1.1 Marketisation Drives University Sector Innovation

The analysis identified an often-expressed value judgement for opening up the university sector to increased competition, as the need to challenge the status quo that accuses traditional universities of stifling innovation, in order to protect their vested interests. Allowing new providers to enter the market is perceived by the news media as an approach that will drive innovation as new providers introduce new ways of working, or new service propositions in order to gain competitive advantage over established universities. Furthermore, the media perceives existing universities as being slow in taking advantage of technology opportunities that may disrupt established operating models, preferring to use new technology as an augmentation to existing processes:

Lawrence “Larry” Summers — who ran Harvard while Mark Zuckerberg was creating Facebook and who features in the film *The Social Network* — told *The Sunday Times* that American and, by extension, British universities needed a shake-up. “Universities need to move in a world that is changing,” he said. According to Summers, a former US Treasury secretary, most companies look nothing like how they did 50 years ago, yet undergraduate education looks much as it did in the middle of the 20th century. In an age when information is easily accessible almost anywhere, universities should adopt new approaches, he says. (*The Sunday Times*, 5/2/2012) ¹⁷²

The perspective that entrepreneurialism can drive transformation and innovation aligns with Clark (1998a) who argues that universities should embrace self-reliance and be opportunity seeking, whilst retaining the highest academic standards. He argues these objectives are congruent and mutually supporting, not in competition or conflict. Such activity will enhance the moral procedural legitimacy of the university, as better ways of doing things are introduced. The University of Buckingham is an example derived from the analysis, of innovation being introduced by a (relatively) new entrepreneurial driven entrant to the university sector:

Owen Hughes, 30, is a mature student at Buckingham and says it was the only local university that would consider an application from him because he had no A-levels. “The others said no straightaway, saying I should do an access course first. Buckingham were encouraging when I rang them – they considered my professional experience.” Hughes, who had been made redundant, chose a two-year accelerated BA in journalism, media and communication, pleased that he could knock a year off a traditional degree. The

fees are £12,000 for each year. Students at private universities appreciate their flexibility and student-centred approach. “Every side of university life is tailored to each student, from the one-to-one tutorials to the career guidance – this marks it out against larger traditional universities.”(The Guardian, 15/2/2017) ¹⁷³

The analysis found governments promoting a change agenda often support the view that new providers bring innovation to an immutable university sector. For example, the then universities minister, Jo Johnson, commenting on the Higher Education Bill in 2016: “Universities are too comfortable with the status quo, to unwilling to face up to new realities.” (Times Education Supplement, 19/1/2017) ¹¹

However, opening up the university sector to allow new entrants may not be without risk. Counter rationale to the innovation argument was identified in the analysis. The media readily reflects that allowing new providers to enter the market may lower overall standards and thereby risk a current aspect of moral consequential legitimacy founded on degree quality. The media perceive this is a view commonly shared across elite universities. For example, reported comments from University UK in 2016:

Universities UK has cited the lower requirement for new entrants as a major worry: “In particular, the intention to significantly relax requirements before institutions are granted the power to award degrees or are allowed to call themselves universities, may damage the reputation of the sector and increase risk to students,” it said in a submission to the bill. (The Observer, 31/12/2016) ⁴⁹

In addition to lowering standards, the analysis identified opening up access to new providers may create an environment where a university’s independence may be compromised, ultimately damaging the reputation of the sector. In an attempt to build pragmatic legitimacy, new providers beholden to government agencies that have power to award profitable contracts, may be reluctant to challenge or criticise those government agencies: “Regulation must prevent providers from using institutions to make profit, as well as underline the universities right to criticise the government and work autonomously.” (The Independent, 2/1/2017) ³⁸

The analysis also reflects concerns that new providers may not offer services in the way established universities have previously provided. This may bring into question the very essence or purpose of a university and potentially impact the cognitive legitimacy of the sector:

With many harbouring grave concerns about plans to open up university status to a new wave of for-profit providers – very few of which will be universities, as we know them. (Times Educational Supplement, 19/1/2017) ¹¹

New providers offering only a subset of service, or through new mediums (e.g. automated on-line courses), may risk conflating the role of the university with other, less academically focused organisations such as training companies. The media reflects this may ultimately “water down world-leading British institutions” (The Daily Telegraph, 2/1/2017)⁴⁴ and thereby impact cognitive legitimacy as expectations of what it means to be awarded a degree become less comprehensible due to the variation in expertise and capability achieved upon graduation.

In sum, the rationale that opening up access to the university sector and allowing new providers to enter in order to encourage new ways of working and foster innovation, is countered by the dialectic concern that increasing *quantity* does not necessarily increase *quality*. Furthermore, if the increased number of providers puts a strain on regulatory capacity, quality may suffer and the university’s original purpose become diluted. As such the overall cognitive legitimacy of the sector may be compromised.

4.1.1.2 Marketisation Provides Better Value and More Choice for Students

A second rationale for the marketisation of the university sector concerns the benefit experienced by the student, as new providers enter the market. Here, increased competition between universities should act to raise educational standards whilst providing better value for money (Dill, 2014). This should challenge the complacency of established universities, previously protected by their dominant market positions and historical reputation.

However, little evidence of increased quality or better value, through the provision of new market entrants, emerged in the analysis. News media reflected that student fees were predominantly set at the maximum allowed (The Times Higher Education Supplement, 1/12/2017)¹⁸⁸ and assessments that combine course satisfaction and graduate salary earning potential, proved inconclusive with regards to quality measurement. (The Times Higher Education Supplement, 17/7/2019)¹⁸⁹ Furthermore, the ability of the student to influence their university outcome remained limited, leading to further government intervention and regulatory control in the form of the Office For Students (OfS):

It puts students at the heart of the system, with the Office For Students making universities rightly more accountable to their students so they get the best value for money. (The Observer, 31/12/2016) ⁴⁹

With little supporting evidence for quality and value improvements to the student the analysis highlights that government will attempt to justify the ‘prevalence of marketisation’ through the entitlement of students to choose a university education over other options. The rationale of student choice is based primarily on pragmatic exchange legitimacy and is intrinsically linked to providing more university places (enabled by letting new universities enter the market): “we want more young people to have the opportunity to access a high-quality university education.” (The Independent, 2/1/2017) ³⁸

The negative implications of student choice were readily echoed in the analysis. The consequences of adopting market principles may lead to a university education valued in terms of student popularity and demand (e.g. prioritising revenue generating courses), rather than the pursuit and preservation of knowledge. The emphasis on pragmatic influence legitimacy may lead to unpopular courses being scrapped, faculties being closed or consolidated. This may have a detrimental impact for some students (i.e. reduced choice) and a detrimental impact for some academics (reduced career options):

Attentive readers will hardly failed to notice that there was a bit of kerfuffle at Middlesex University recently. Philosophy was threatened with closure: ‘I think, therefore, I am redundant’. The academy seems at first sight anyway, to have met the world of Lord Alan Sugar. (The Times Higher Educational Supplement, 29/7/2010) ⁸⁰

The analysis highlights that course closures are likely to have a disproportionate impact on those subjects lacking the quantifiable economic returns required by the market-led principles of resource allocation and return. The news media reflects a concern among academics that subjects such as the arts and humanities will suffer disproportionately from any reductions in funding due to the consequences of marketisation:

There have been complaints that ministers view arts degrees — for which -Britain has a global reputation — as -second-rate compared with sciences. There are fears young

people will not be able to take degrees in languages, philosophy, theology, dance or drama at university in some parts of the country. (The Sunday Times, 29/4/2018) ¹⁷⁴

In sum, the rationale and value judgement that a market-led university sector will provide students with more choice and better value should recognise the implication of choice. Choice may lead to popularity contests where the market may prioritise *majority preferences* at the expense of *minority interests*, risking a new form of inequality across the university sector (e.g. against Arts and Humanities subjects) with implications for the university as pragmatic exchange legitimacy overrides cognitive legitimacy and certain types of students (e.g. science) are privileged over others (e.g. arts).

4.1.2 *The Events of Market-led University Sector (Critical Realist Actual Layer)*

The grounded theory analysis of newspaper articles yielded three events or outcomes supporting the conceptual category 'The Prevalence of Marketisation'. These are: the shift of funding burden to those who benefit from a university education; the privatisation of certain university services; and finally, the introduction of market controls.

4.1.2.1 Shifting the Funding Burden

University funding must compete with other social priorities. The declining proportion of tax receipts available to fund higher education, along with increased national debt levels, has forced governments to look at alternative funding strategies. To facilitate university expansion the government has transferred funding liability from the public purse to private households through the imposition of student loans (shifting public debt to private debt). This move is recognised as a contributory force of a market-led university sector (Robertson and Dale, 2013).

The analysis highlights that the imposition of student loans to pay for university education remains contested. The media readily reflects this:

People are divided over whether it is fair to ask students to pay up to £9,250 a year for university tuition, according to a poll. In findings that suggest there may be little political advantage to the British government in overhauling the system, 43 per cent said that

the annual cost for English students, repaid by loans, was fair, with 41 per cent saying it was unfair and 16 per cent saying they did not know. (The Times, 20/10/2017) ¹⁴⁵

Regardless of normative considerations, the analysis highlighted the perception that student loans are progressive in nature, shifting the burden of payment to those who benefit through the imposition of tuition fees, whilst creating a mechanism of payment (student loans) meaning the student does not incur the cost for their education if their future income level remains low. This supports moral consequential legitimacy as the cost incurred by the student for their education is linked to the benefit they receive:

Mr Lewis says that cutting the interest rate on the loans, a key recommendation of the Treasury select committee, or lowering tuition fees will benefit only the wealthiest graduates. This is because only a small proportion will earn enough to repay their loans within 30 years, after which the debt is written off. Graduates begin repaying once they earn £21,000, a threshold that will rise to £25,000 this autumn. They repay 9 per cent of their earnings above this threshold. (The Times, 23/2/2018) ¹⁴⁴

However as university funding becomes increasingly dependent on tuition fees the implications of government policy shifts (e.g. pressure to cut tuition fees) and the risk to university finances become apparent. This concern is frequently expressed in the media:

Alistair Jarvis, the chief executive of Universities UK, which represents vice-chancellors, said: "A fees cut might grab the headlines but would leave a serious funding gap. Unless this shortfall is made up from new funding sources, and guaranteed long term, we risk returning to a time when university places were capped and courses were seriously underfunded. That would be bad for students, for the skills needs of the country and, crucially, for social mobility." (The Times, 3/11/2018) ¹³⁹

The analysis found that rather than providing autonomy from the state by generating its own income through tuition fees (Etzkowitz, 2013) universities may become locked in national state models structured by funding legislation, reporting mechanisms (league tables) and political imperatives. The news media reflects that universities and university management are extremely concerned that political pressure to cut tuition fees may impact their global competitiveness. For example, Hugh Brady, Vice Chancellor of the University of Bristol is reported as saying:

“But will we be able to compete with top US research intensives like the University of California, when we are running on fumes?” he asks. “You’ve got to say it’s unlikely.” (The Guardian, 9/5/2019) ⁵⁴

Similarly, the media highlight that universities express the point that tuition fees do not only cover the cost of a student’s course, fees are needed to cover the continued investment in university infrastructure. Sir Christopher Snowden (then President of Universities UK) comments:

Universities have shouldered substantial cuts over the last few years. The change in the funding model, moving from direct funding by government to student loans, has changed the way cash flows into higher education, creating the false impression that universities have benefited significantly. This is not the case and as capital funding has been withdrawn student fees have to be used to invest in the physical campus infrastructure to cover the substantial cost of maintenance and facilities. (The Daily Telegraph, 24/1/2014) ¹⁴³

The analysis shows a general support for tuition fees from the university perspective, if fee levels can be maintained or increased. However, as the funding burden begins to fall on the student the analysis shows that the need to demonstrate value for money may increase the importance of pragmatic exchange legitimacy over cognitive legitimacy. This issue may be complicated by the subjective nature of value:

So students don’t feel as though they get good value for money at university? The survey results released by the Higher Education Policy Institute (HEPI) last week are hardly surprising. Getting our “money’s worth” is impossible when there’s no simple way to calculate exactly what we pay for. Dissatisfaction should be expected as tuition fee hikes, pension cuts and the teaching excellence framework push higher education as a product students purchase. (The Guardian, 13/6/2018) ¹⁴²

The question of value is further complicated when considering a university education as a relational good. This is the situation where the more students that have a university degree, the less the intrinsic value of a university degree becomes (Marginson, 1995). As a relational good, a policy of massification will reduce the transaction value received by the student for their university education.

Finally, the impact of debt incurred by the student, regardless of whether the loan is repaid, is often highlighted by the news media. This may include constraints on securing other finance (e.g. a mortgage), the marginal tax disincentive to seek better higher paid employment and the psychological influence of debt. Such factors may reduce moral consequential legitimacy as potential students begin to suspect the cost to obtain a degree (financial *and* emotional) is too great. For example Theresa May quoted in The Guardian:

However, she put pressure on her successor to reduce the burden of debt on young people, as she believed the system was not working for many students and their families. “I’ve spoken to parents and grandparents forced to scrimp and save to fund their children and grandchildren through university,” she said. “And I’ve seen how young graduates starting out in their adult lives feel weighed down by the burden of student debt.” (The Guardian, 30/5/2019) ¹⁴⁶

In sum, shifting the funding burden from the state to the student has been identified as an event/outcome of the ‘Prevalence of Marketisation’. Though the principle of ‘those benefiting from a service are those who should pay’ is rarely challenged, the related issue of whether the university offers value for money is becoming more pertinent as the funding burden shifts. If a university degree, in general, is not considered value for money, moral consequential legitimacy may be lost.

4.1.2.2 The Privatisation of Certain University Services

Universities like many public institutions reflect the political, economic and cultural norms of today’s society. By adapting to their external environment through a process of internal change, universities begin to characterise their environment. If the environment is dominated by capital accumulation and neo-liberal ideology, universities will adapt. In this way, a university can operate and act like a private corporation without the need to be formally privatised (Sotiris, 2012). This brings with it some of the negative attributes associated with private enterprise. For example, the analysis highlights:

Mary Gallagher argues the commercialisation of higher education manifests itself in “excessive executive remuneration” and “exorbitant tuition fees” that are a “self-betrayal” that is “silent about its implications”, reemphasising the missing purpose of a commercially driven university. (The Sunday Times, 25/11/12) ⁵⁷

Such outcomes may not conform to the paradigm of university (i.e. as a public good) held by the public. This may have a harmful impact on cognitive legitimacy. Similarly, a privatised view of the university may be supported by the rise of private authority, to the detriment of government control. This may reduce transparency over the governance and delivery of higher education, de-emphasising the public good nature in favour of instrumental measures such as profitability and economic growth (Robertson, 2010). The analysis highlighted that the emphasis on objectives commonly found in the private sector (profit and loss) may have governance and operational impacts resulting in the closure of courses and departments. (The Times, 17/6/2011)¹⁶⁸

The privatised view of the university is further evidenced in the analysis by the role of private companies providing advice, services and consultancy in the formation of government policy. As Mahony argues such work tends to blur the boundaries of independence and stakeholder and has been referred to as the “privatisation of policy” (Mahony* et al., 2004: 277).

The analysis also shows that university funding through private donations may reduce public provision. For example in the US and UK, tax deductions that encourage private donations to universities reduce the overall tax yield leading to public spending shortfalls that have an adverse affect on the funding of public universities.

The tax break applied to gifts means that a significant chunk of a private donation is in effect money deducted from tax revenues ... an indirect tax subsidy. (The Times Higher Education Supplement, 6/10/2016)⁹¹

Conversely, UK universities legally founded on public benefit missions conferring tax-exempt status may find due to their greater entrepreneurial activity, governments reviewing their charitable status and tax benefits in order to increase tax yields (Hayter and Rooksby, 2016).

It is the first private provider to be granted a university title since Ministers relaxed rules to encourage new operators into Britain’s higher education market and only the second since 1983, when Buckingham received its university status. The college was previously a charity but in April it sold the law school and rights to the name College of Law for about £200 million to Montagu private equity, a venture capital firm. (The Times, 23/11/2012)¹⁶⁹

Similarly, as universities become increasingly commercial in the eyes of the public, there may be pressure to judge universities by the same standards imposed on private corporations. This may change the nature of cognitive legitimacy. For example, considering the legal perspective, universities due to their “increasingly business-like behaviour” (Hayter and Rooksby, 2016: 19) are more likely to be treated in a similar manner to profit-making enterprises than public bodies.

Another form of privatisation has seen university collaboration with business in the form of course and faculty sponsorship. Course collaborations between universities and third parties legitimise the third party’s actions and objectives. For the university it provides publicity, targeting potential students sympathetic and supportive of the 3rd party’s brand but raises questions about independence and moral procedural legitimacy:

The Body Shop’s new Academy of Business is to offer its first masters degree, in responsibility and business practice at the University of Bath. Body Shop recognise its all too easy to dismiss the thinking as “another Body Shop flaky idea”. But “this revolutionary thinking has to be institutionalised.” (The Times Higher Education Supplement, 3/1/1997) ⁷¹

In sum, the entrepreneurial university currently retains its status as a public institution. However, without making the strategic decision to become a private institution, universities are being forced to act increasingly like a private enterprise. The interweaving of internal practice and external expectation has created a privatised view of the university enabled by private governance mechanisms, private funding and private sponsorship. This is likely to lead to changing public expectations of the university, as a public institution, with detrimental impact on cognitive legitimacy.

4.1.2.3 Establishing Market Controls

To support the market for university services certain controls such as comparative product information and a price mechanism have been established.

The analysis highlights that such measures controlling the market for university services may create inconsistent and paradoxical behaviours. For example, there may be issues with student generated survey results aimed at improving teaching standards that reward universities by giving them additional freedom to raise student fees:

Sorana Vieru, NUS vice-president for higher education, said “Whereas students could once fill in the survey in the hope of improving the education for future students, now they carry the weight of raising tuition fees.” (The Times, 8/2/2017) ⁶⁵

Similarly, the introduction of comparison websites to rate university courses in terms of student satisfaction and employment prospects, designed to provide better information and help the student make better choices, may in fact act as a recruitment tool for certain universities. The news media highlights that such websites, influenced by university advertising or sponsorship, might be encouraged to highlight certain universities over others, compromising moral structural legitimacy. As the information is provided by third parties utilising unaccredited surveys, its accuracy and completeness is open to question as well as its independence:

Whatever the truth, the lack of policing of the ‘Destinations of Leavers from Higher Education’ survey leaves it wide open to distortion and makes a mockery of the government’s ambitions – set out in its 2011 White Paper – to “empower prospective students” by providing them with better information. (The Times Higher Education Supplement, 12/3/2015) ¹⁴²

The analysis highlights that control is also achieved through national and global league tables designed to highlight the best performing universities. These mechanisms emphasise factors relating to pragmatic exchange legitimacy to the detriment of currently established cognitive legitimacy. Such league tables may create a barrier for up and coming universities and consolidate the position of established high-ranking institutions, thus stifling the innovation they hoped to foster. This is because the best students, new funding awards and research opportunities etc. will be attracted/awarded to those universities higher up the league table, enabling better performance that consolidates their league position (David, 2016). The news media often emphasised the inconsistencies in league tables and in ranking systems:

Now the London School of Economics (LSE) is trying to understand its lowly ranking in teaching excellence framework (TEF) results, released by the universities minister, Jo Johnson. Students pay £9,000 a year and want value for money but the LSE, with a bronze ranking rubs shoulders not only with other top universities such as Southampton and Liverpool, but also with the British School of Osteopathy, Plymouth College of Art,

and Cumbria and Suffolk universities. Recipients of gold awards included Coventry, Derby and Lincoln universities. (The Times, 25/6/2017) ¹⁴⁸

In sum, a dialectic exists where no free market is actually free of government intervention, none more so than the market for university services. The implementation of controls relating to the university sector are often responses to market failings or are driven by changing political imperatives (e.g. reducing student fees, being seen to raise standards). Therefore they may appear to be incremental or even unplanned. This may impact cognitive legitimacy if the public observe university policy to be inconsistent and unpredictable.

4.1.3 Legitimising Mechanisms of a Market-led University Sector (Critical Realist Real Layer)

By considering the interrelationships between the experiences and events previously highlighted the analysis, through a process of retrodution, identified potential structures and causal mechanisms that provide causal explanation for the impact of the ‘Prevalence of Marketisation’ on university legitimacy.

The following section describes these causal mechanisms. Two causal mechanisms have been identified: the search for profit; and secondly, the rise of national populism.

4.1.3.1 The Search for Profit

It can be argued that a cause of the ‘Prevalence of Marketisation’ is the inexorable journey to entrepreneurialism universities face in the search of profit.

A critical feature of the Entrepreneurial University concerns agency and its ability to make strategic choices. However, it has been argued that universities “remain a hegemonic apparatus, a condensation of practices and rituals that has to do with social reproduction” (Sotiris, 2012: 118) and therefore the agency driving the entrepreneurial turn is an illusion. Universities have merely adapted to the national and global political imperatives of capital accumulation (the search for profit) and the market orientation encapsulated in neo-liberal ideology, where human capital potential is analysed in terms of return on investment. In effect, because of the economic imperatives of today’s globalised society, universities are forced to behave like private corporations operating under capitalistic imperatives (searching for profit).

This effect is reified by the forming of new social norms developed around the concept of individualism, neo-liberalism and parentocracy. Parentocracy is when the wealth and wishes of the parents, rather than the abilities, desires and effort of the child drive a child's opportunities. Defining work, talent and consumption as the major attributes required to drive the new 'skills society' embodied in the normalisation of super-salaries, the concentration of wealth (wealth marrying wealth) and the growth of the new working poor (Robertson, 2016). Here, the search for profit is transposed to the financial quantification of personal fulfilment and happiness (i.e. high salaries and wealth accumulation). Well-being is defined purely as a product of comfort, wealth and ownership (Hessel and Morin, 2012)

Thus, the events and experiences of the 'Prevalence of Marketisation' are caused by the necessity for universities to be entrepreneurial on the supply-side of the market in the search of profit and the normalisation of a consumption and wealth-led society, on the demand-side of the market.

4.1.3.2 The Rise of National Populism

The search for profit is an enabling power (cause) of the 'Prevalence of Marketisation'. An equally important consideration is what will cause a disabling of the 'Prevalence of Marketisation'? (i.e. a liability of the 'Prevalence of Marketisation'?)

In recent years there has been a rise in what has been loosely labelled as populism. Populism rallies against the globalised economic order (neoliberalism) and is evidenced by the election of Donald Trump in the US and the Brexit debate in the UK (Rodrik, 2018). What constitutes or causes populism is not for discussion here, other than to assume it reflects an expression that some parts of society face disproportionate financial and social hardship as a result of globalisation, neo-liberalism and austerity not endured by other parts of society.

This has led to tensions: between globalised universal values encompassing economic geopolitical collaboration and national values encompassing identity and state control; between a redistributive model and compensatory model of the welfare state; and in the provision of public services by private means (Mundy, 2007). Populism may become enacted in government policy or form part of a general cultural resistance, thereby creating a disabling force (liability) on the "Prevalence of Marketisation" especially with regard to globalisation and privatisation.

Firstly, globalisation may be weakened by populism. The university sector representing globally focused institutions of education, adapt to global policies reflecting western modernity to demonstrate their contemporary credentials as a member of an international community (Verger, 2014). Universities have shifted further away from forms of national control by the “growing authority and institutional influence of intergovernmental and other cross-border forms of governance” (King, 2009: 70) enabled by transnational agencies, global standards and international trade agreements. Refocusing on national priorities to serve the needs of populism might see for example, higher education systems transformed to meet national skills needs (Beerkens, 2008) and restrictions imposed on international student inflows (Bista et al., 2018).

Secondly, privatisation may be weakened by populism. The opportunity to secure profits will lead to private suppliers entering the university market sector. Conversely, if profit opportunities decline we can expect the number of private suppliers to fall, especially in peripheral activities such as outsourcing, consulting and facilities (Alexander et al., 2018). Furthermore, Valenzuela et al. (2014) argue that political and social pressure may intensify if privatisation is seen to increase social inequality (e.g. the use of private tutoring, admission policies favouring privately educated pupils). Also Robertson (2010) argues that private enterprise takes a significantly higher proportion of profit whilst public authorities and government retain significant risk. The perception that risk and reward relationships are skewed in favour of the private over the public, may lead to government intervention. Thus, declining profit opportunities, the perception of inequality and the rebalancing of risk may reduce the proliferation of private provision.

In sum, the rise of populism may lead to political and cultural responses that impact the ‘Prevalence of Marketisation’. Populism may particularly impact the global nature of the university market as national priorities take hold and the provision of the private supply of university services as barriers to commercial trading increase.

4.2 The Impact of Marketisation on University Governance

The following section details the findings relating to the conceptual theme ‘university governance’ that emerged during a grounded theory analysis considering how university legitimacy is affected in a market-led university sector. It will highlight how university governance is experienced (value judgements and perceptions) in a market-led environment, what events (outcomes and their properties/consequences) indicate market-led governance and finally, what university governance related causal mechanisms or structures, cause the experiences and events that ultimately impact university legitimacy.

4.2.1 *The Experience of University Governance (Critical Realist Empirical Layer)*

A grounded theory analysis of newspaper articles related to the conceptual theme ‘university governance’ yielded three critical realist experiences (value judgements or perceptions). These are: government policy to encourage university entrepreneurialism may threaten university autonomy; an increased external focus may change internal organisational structures; and finally, increasing university management influence may affect the power dynamic within a university with direct consequences on collegiality.

4.2.1.1 The Threat to University Autonomy

Government intervention in higher education is not a new phenomenon and the advent of market competition across the university sector has not diminished the role of the state.

In recent times certain parts of the welfare state have come under pressure from efficiency measures and austerity or their suitability for privatisation, leaving higher education as one of the few effective “instruments of national policy” (Green, 1997: 4). The analysis found that government might be inclined to leverage a threat to university autonomy as a means to involve the university in the delivery of certain policy objectives. This may impact the moral structural legitimacy of the university:

Academic freedom has always depended on how well universities satisfy the goals of politicians and the demands of the economy. (The Times Higher Education Supplement, 27/9/2012) ⁷⁹

However, the analysis found that government policy changes to encourage universities to be more entrepreneurial or adopt more commercially orientated governance and management practices are often portrayed as a divergence from public good principles and as a threat to university autonomy. (The Daily Telegraph, 2/1/2017)⁴⁴ For example, government attempts to bring transparency to the governance processes employed in Scottish universities raised concerns regarding their charitable status and autonomy:

The universities say that it is a direct threat to their autonomy and that the level of direct government intervention could mean they lose their charitable status or be designated as public bodies rather than independent institutions. (The Guardian, 11/9/2015) ¹⁷

The analysis highlighted the threat to university autonomy often conflates several concepts: the institutional independence to set the strategic direction of the university enabled through the self-generation of revenue reducing the dependency on state funds; secondly, the freedom of individual academics and faculties to pursue their own knowledge interests; and finally, the imposition of management processes typically serving regulatory control mechanisms. The presence of conflated rationale makes it difficult to understand the impact of specific challenges to autonomy on university legitimacy.

The analysis found that government intervention, however light, in one or other of these areas is typically interpreted as impacting a holistic view of autonomy that affects the university as a whole rather than just the specific aspect of autonomy targeted. Such conflated argument may impact the moral structural legitimacy of the university:

Institutional autonomy was essential, not as a shield to protect the independence of the university but as a basis for the university's legitimacy as a pillar of society. (The Times Higher Education Supplement, 27/9/2012) ⁷⁹

The analysis identified a dialectic relationship with regards to autonomy and government intervention. Policy initiatives encouraging a university to be entrepreneurial, leading to diversified income streams that reduce reliance on state funding, may increase autonomy

(Bronstein and Reihlen, 2014). On the other hand, government intervention through the imposition of management controls and quality assessments, needed to address market inefficiencies such as monopoly powers and information asymmetry, may decrease autonomy (Teixeira et al., 2006).

In sum, university resistance to market-led policy changes impacting university governance is often interpreted in the news media as attacks on university autonomy that should be resisted. Whilst government intervention encouraging entrepreneurial outcomes may protect autonomy (through self sustainability) and therefore enhance the university's moral structural legitimacy, market-led or entrepreneurial governance reducing university autonomy may impact the cognitive legitimacy of the university,

4.2.1.2 Compromising Internal University Structures

Universities have expanded and diversified as a result of the increased marketisation of higher education. University organisational structures have become fluid to exploit new opportunities with traditional departmental and faculty boundaries breeched to facilitate external partnerships and collaboration. The analysis identified that the blurring of organisational boundaries may compromise moral procedural legitimacy as established governance based on autonomy and independence from the state becomes strained due to the added complexity of external relationships. The news media reflects that this may lead to a reconsideration of university power: "Serious thought should be paid to an analysis of the university as a self-governing corporation unique in society." (The Times Higher Education Supplement, 4/12/1998) ⁸⁷

Where the entrepreneurial university has "blurred the boundaries between university, government and industry" (Sam and Van Der Sijde, 2014: 902) governance mechanisms should reflect the needs of all stakeholders. The analysis finds that the risk arises that sector specific controls and regulation may be overridden by industry mechanisms prioritising profit and growth. This may confirm the perception that the entrepreneurial university is misinterpreted as the subordination of the university to business (Etzkowitz, 2013) impacting its moral structural legitimacy.

The analysis identified that changing governance structures resulting from overlapping internal and external responsibilities may confuse the traditional concept of a university, in terms of how it both serves and scrutinises society (Sultana, 2012). When external university boundaries across

faculty and department are compromised it brings into question the traditional purpose of departments and faculties. Cognitive legitimacy requires the concept of the university to be comprehensible to the public. As boundaries blur and responsibilities become confused, the previously defined and understood purpose of the university may be challenged:

For the university to retain its legitimacy and therefore its income, privileges and public trust, it requires boundaries, as well as a centre able to speak for its values and support the principles of inquiry consistent with plural and broad-minded cultures. (The Times Higher Education Supplement, 4/12/1998) ⁸⁷

Finally, the blurring of organisational boundaries may lead to internal management processes and responsibilities becoming confused. The analysis found that governance might be compromised when individual responsibilities and accountabilities are not clearly defined across management processes (for example remuneration) or individuals do not have the capabilities to fulfil their responsibilities. This may impact moral personal and procedural legitimacy as the perception may emerge that individuals are not qualified for their position:

Specific governance failures have also been identified at the University of Bath; and it is clearly untenable for vice-chancellors to continue to sit on remuneration committees, regardless of whether they excuse themselves when their own pay is discussed. But the issue is more fundamental than that. University governors seem to be making decisions with little sense of what universities are. Insiders sometimes express horror at the lack of understanding on display – questions such as “what is the QAA?” are asked. (The Times Higher Education Supplement, 14/12/2017) ¹⁷⁶

In sum, as universities increase external focus a loop occurs where internal organisational structures become more flexible, complicating a university’s central governance and ultimately redefining the university’s purpose. This in turn, like threats to autonomy, may impact the cognitive legitimacy and moral structural legitimacy of the university.

4.2.1.3 Power Imbalance may Reduce University Collegiality

The analysis found that new governance models that under-represent the views of academics and students in favour of a managerial view prioritising commercial effectiveness and the

exploitation of revenue generating opportunities may change the collegial culture of the university and impact university legitimacy.

The governance of universities is determined by the balance of power in the relationships between the executive, academics and students. The analysis highlights a perception in the media that the governance of universities may not be legitimate if senior management influence outweighs the representative views of academics and students. This may lead to reduced moral procedural legitimacy as certain voices (students/academics) are silenced:

Matt Waddup, head of policy at the University and College Union, said that the time “has come for proper transparency in the key decisions being taken at the top table of our universities and a serious look at who is taking them”. “We need to have staff and student representatives on the major decision-making bodies if the sector is to start rebuilding trust. (The Times Higher Education Supplement, 20/2/2019) ¹⁸³

The analysis identifies that if the balance of power across the university fails to reflect stakeholder interests and contribution, collegiality may be impaired. The moral structural legitimacy of the university requires congruence between power-influenced governance and culture. It has been inferred that collegiality is a critical cultural characteristic underpinning the very purpose of the traditional university (Tapper, 2017). The news media highlight that if market-led pressures or government intervention leading to the imposition of management controls impact collegiality the very purpose of the university may be compromised:

Universities are by definition collegial, not authoritarian, institutions; if they are not collegial in their governance, they may bear the name “university” but they will not truly be universities, nor will they be regarded as such. (The Guardian, 11/1/2018) ⁵⁸

However, the manner in which power imbalances are addressed is important. Cognitive legitimacy is enhanced when voices independent to the university are portrayed as being in alignment with university objectives. The analysis identified certain organisations providing academic and student representation are sometimes viewed with suspicion and cynicism. For example, questions were highlighted regarding the role of Universities UK: is it the academics forum to influence government policy or is it a way for government to dictate to universities?

Originally believed by university staff to be to explain to government the universities' views on matters ... but was actually in the business of forcing the universities to accept half-baked nonsense politicians dreamed up. (The Guardian, 11/1/2018) ⁵⁸

Finally, the analysis found that recruiting academics into management roles might not address power imbalances impacting governance. The separation of management and academic responsibilities may lead to different priorities and misrepresentation, regardless of the background of the individual manager, as the commercial pressure to meet financial targets is likely given a higher priority than the contribution of academic work:

The integrity of academic excellence is lost when academic leaders are replaced with "fundraising technocrats." (Mary Gallagher, The Sunday Times, 25/11/12) ⁵⁷

In sum, the moral procedural legitimacy of the university will be affected by any imbalance of power reflected in university governance processes that impair collegiality. The belief permeates news media coverage that management influence should not outweigh the voices of the academic or the student.

4.2.2 *The Events of University Governance (The Critical Realist Actual Layer)*

A grounded theory analysis identified two critical realist events characterising 'university governance' in a market-led university sector. These events are: the implementation of business management practices; and, an increase in academic staff complaints.

4.2.2.1 Implementation of Business Management Practices

Government direction and general competition across the sector has led entrepreneurially focused universities to implement management practices and organisation structures from other, considered to be exempla, commercially successful private sector companies. These practices are commonly described as a variant of New Public Management (NPM). Khvatova and Dushina (2017) argue that NPM threatens university legitimacy as the overall objectives for NPM are unclear at best and at worst contradict the collegiate, yet autonomous nature of the university faculty model. This is reflected in the analysis:

The advance of the 'business model' of university governance has disempowered academics, diminished their decision-making authority and weakened their ability to innovate. (The Times Higher Education Supplement, 3/4/2019) ¹⁹⁰

If management processes are perceived to limit decision-making effectiveness, moral procedural legitimacy may be impacted.

The analysis highlighted the understanding of what business management means within the university context may be limited, leading to further alienation between the university executive and academics (Philpott et al., 2011). The analysis highlights that the skills difference between management and academia is rarely recognised. Consequently academics receive little or inappropriate training before taking on management roles. This may impact moral consequential legitimacy as academics struggle to achieve the required management outcomes:

We see more anecdotal critique of managerialism than research examining university management as a profession that needs to work in tandem with scholars. For all its insights, the critique of 'management as ideology' has become a solution-free zone in a sector that is desperately in need of solutions. Given these factors, it is unsurprising that university staff often step into academic and administrative management roles without much preparation. (The Guardian, 26/9/2012) ¹⁴⁹

In addition to the managerial capabilities required by NPM, the analysis emphasises the differences in priority between academics and management may lead to a loss of institutional knowledge when academics take on and prioritise management responsibilities over academic. This may have implications for moral consequential legitimacy as declining personal knowledge reduces the academics contribution to their faculty, impacting research and teaching outcomes:

The trouble is that some important things are lost when academic management becomes a full-time career. The strength of the traditional part-time academic-manager lay in their expert knowledge and credibility with academic colleagues. For full-time managers, divorced from day-to-day academic activities, specialist knowledge rapidly becomes out-of-date and professional credibility increasingly difficult to maintain. (The Guardian, 27/7/2017) ¹⁵⁰

The approach to implementing NPM is critical to its effectiveness. The analysis identified a perception in the media that management processes are often seen as being imposed on academia rather than being implemented in collaboration, resulting in an adverse impact on staff morale. Moral consequential legitimacy requires an alignment between contribution (staff input) and outcomes (management decisions). The analysis found that often only the most senior academics are consulted, marginalising junior academics and students. This may create tension between the control and oversight needs of management practice and the academic need for creativity and autonomy (Bronstein and Reihlen, 2014):

At the institutional level, junior UK academics feel they have less influence "in helping shape key policies" than those in any of the other countries polled. Academics from the UK are also, after Ireland, the most likely to report top-down management. Responses to this question across Europe correlate strongly with satisfaction levels. UK academics were suffering from growing stress levels as a result of heavy workloads, management issues and longer hours. (The Times Higher Education Supplement, 11/10/2012) ¹⁷⁸

The analysis also identified that the management of entrepreneurial risk differs between academics and management. Management and academic staff treat risk inconsistently. Academics adopt a scientific approach to research and investigation which may be an anathema to an entrepreneurial culture desired by management with an "ethos built on the acceptance of risk and chaotic action" (Gramescu and Bibu, 2015: 102).

However, the analysis highlighted that university management often take a hands-off approach to risk relying on academics to manage any implications. This may impact moral personal legitimacy within the university. The media often convey the perception that management accountability may be lacking:

Legitimacy is enhanced when risk is balanced with the ability to control risk. Governance models may become illegitimate where stakeholders have total control yet face no risks or adverse consequences for their actions i.e. have no skin in the game. (The Times Higher Education Supplement, 23/4/2009) ⁷⁸

Finally, as entrepreneurial universities are driven to become more innovative, their natural cultural inclination of being conservative and risk adverse may be challenged (Mintzberg, 1973, Kirby, 2006). The analysis identified the newspaper media often create a negative perception of a

university's approach to risk. Moral procedural legitimacy may be impacted if a university is perceived as being overly risk adverse and inward looking:

Universities currently suffer from three malaises: they are deadly conservative, not nearly as socially inclusive as they should be, and the research environments that they cultivate remain too enclosed. (The Times Higher Education Supplement, 4/5/2015) ¹⁷⁷

In sum, the analysis highlights the adoption of business management practices within some market-led universities has acted to widen the gap between academics and administrators, where tension is created when management processes are perceived as being imposed upon academics. This tension is further highlighted by differences in risk management. Governance and management practices need to bring together administrators and academics in order to maintain moral procedural legitimacy.

4.2.2.2 Increase in Academic Staff Complaints

The emergence of the entrepreneurial university, creating differing responsibilities and capabilities between management and academics, has led to tension and conflict. Management practice is often imposed in a top down manner that sometimes marginalises academics leading to resistance (Philpott et al., 2011).

The analysis found evidence of amplified tension and conflict between management and academia. This is characterised by an increasing number of staff complaints regarding bullying and harassment. Such complaints may be evidence of inadequate workplace practices suggesting reduced moral procedural legitimacy. The media highlighted that bullying behaviour has persisted over the period characterising the entrepreneurial university and the imposition of management practices such as NPM:

Declan Quigley believes bullying is widespread in academia. Little seems to have changed, he says, in the past two decades. This newspaper is aware of several academics, including leaders in their field, who have taken legal advice over bullying and harassment. (The Times, 18/4/2019) ¹⁵¹

The analysis found that as the commercial responsibilities of the academic increased, pressures regarding motivation and wellbeing developed. This may not be due to increased workload alone

but also to the conflating of commercial and academic priorities (Etzkowitz and Dzisah, 2015) and the manner in which commercial performance objectives are managed. This may lead to the aforementioned accusations of bullying and harassment and issues for workplace mental health and personal wellbeing:

The marketisation of higher education has been accompanied by sharp increases in the use of counselling and occupational health services by UK university staff, according to a new study. Responses to Freedom of Information requests by 59 institutions showed that counselling referrals climbed by an average of 77 per cent between 2009 and 2015, while occupational health referrals rose by 64 per cent. Dr Morrish says that academic workloads are too high and that researchers suffer increased pressure because of the use of performance management. (The Times Higher Education Supplement, 23/5/2019) ¹⁷⁹

Issues relating to occupational health may become embedded within the culture of the university and thus impact its moral structural legitimacy. Moral structural legitimacy is in part determined by the hegemony between different groups of people in the workplace. As such, although instances of bullying and harassment can occur across academia regardless of sex or race, the impact and prevalence is often more pronounced for woman and racial minorities (Lester, 2013). The analysis found examples of this impact:

Black female academics face a culture of “passive bullying and racial micro-aggressions” in UK universities that holds back their chances of promotion, a study claims. Rather than starting from a de facto position of assumed fairness, institutions must recognise that how they engage and treat black female academics at each stage of the career trajectory has the potential for unfairness and bias and, in turn, [can] affect their ability to progress successfully to professorship,” the study concludes. (The Times Higher Education Supplement, 4/2/2019) ¹⁷⁹

Finally, as market-led enterprises, universities are increasingly aware of the impact of reputational damage on their commercial revenues. The increase in staff complaints concerning bullying and harassment has led to strategies attempting to cover-up such activity. The analysis identified an increase in the use of legal forms of redress, such as non-disclosure agreements, attempting to cover up claims of inappropriate management action:

Universities have spent almost £90 million on pay-offs with gagging orders attached over the last two years, new figures show, as academics claim bullying and sexual misconduct claims are being silenced. The huge sum is said to have been spent on around 4,000 settlements, some of which are reported to relate to allegations of bullying, harassment or sexual misconduct. (The Daily Telegraph, 17/4/2019) ¹⁵²

The use of Non Disclosure Agreements (NDAs) may impact the ability of the university to build both moral structural and procedural legitimacy, as the lack of transparency regarding failings in workplace process and culture lead to suspicion and doubt in the integrity of the university.

In sum, increasing academic commercial responsibility has brought with it new approaches to management that have coincided with an increase in bullying and harassment claims and dialectic measures to suppress the adverse publicity of such complaints. The moral structural legitimacy of the university is in part dependent on a positive workplace environment free of bullying, harassment and other contumelious behaviours. If such activity is present or suspected to be present, university governance may need to be strengthened to support the university's moral structural legitimacy.

4.2.3 University Governance Legitimising Mechanisms of the Real Layer

In an attempt to explain the experiences and events of 'university governance' in a market-led university sector previously described in this section, two structures or casual mechanisms have been retroductively derived from the analysis. The two mechanisms are: the affinity between university management and policy makers; and secondly, the dynamic and divergent nature of university structure.

4.2.3.1 The Affinity between University Management and Policy Makers

Governments are increasingly looking for universities to engage in external activities that drive economic and social development. To facilitate this activity close relationships are formed between policy makers and senior university administration, creating hegemony of management over academics. These relationships risk changing the leadership dynamic within universities impacting the very nature of university governance.

Policy makers are more likely to prefer a small number of senior relationships with a university, rather than multiple relationships spanning departments and faculties. Therefore, to meet external policy demand university management is more likely to impose a centralised top-down form of governance rather than allow individual faculties to make autonomous decisions. If this happens too quickly, or without sufficient support, faculty resistance is likely to be high.

As policy makers are more likely to favour hard outcome focused activity, such as technology parks, university governance processes are likely to favour those disciplines that create tangible measurable outcomes (engineering, technology, medicine) and thus these will attract positive funding decisions. Disciplines creating intangible outcomes (art and literature, philosophy, social studies etc.) are less likely to attract funding. This may have a negative societal impact as the benefit multiplier effect of such disciplines (e.g. raised cultural awareness and improved social cohesion) will be missed (Philpott et al., 2011).

The flow of funding to research focused on hard outcomes is likely to enhance the reputation and power of those academic staff able to attract such funding at the expense of other academic staff operating in disciplines creating softer outcomes. This risks creating a self re-enforcing hegemonic hierarchy within the university, biased toward hard outcome research.

4.2.3.2 Dynamic and Divergent Nature of University Structure

Being market-led, entrepreneurial universities are not statically structured organisations. As such their governance processes are dynamic, continually responsive to internal and external demands. The dynamic nature of governance comprises two components.

Firstly, dynamism is created by the unique risk profile of each university. All entrepreneurial activity involves risk both at the institutional and individual level (Shattock, 2005). The act of entrepreneurialism is one of risk taking where an individual or institution's capital, be it financial or intellectual, is used as a stake (put at risk) with the hope of generating capital growth (return).

The management of risk is a continual process that requires an organisation to continually adapt and innovate in order to maximise its capital growth. This leads to organisational changes to structure, processes and people best described as output-driven performative change (what an organisation does) and process-driven constitutive change (what the organisation is). As universities have many different forms of capital with numerous risk profiles, they can adopt

multiple entrepreneurial positions covering many dimensions. Are the university's objectives hard (economic) or soft (social and cultural)? Does the university operate in an open market or within a closed state sector? Does the university go alone or form external alliances? Therefore entrepreneurial universities, rather than converging to adopt similar operating models, are more likely to diverge in operating structures and strategy creating very different kinds of university (Barnett, 2005).

Secondly, universities are typically decentralised institutions with considerable autonomy residing at the faculty level and each faculty differentiated culturally and organisationally. Faculties will likely evaluate top-down instructions from university management for applicability and value to their specific area. Entrepreneurial opportunities can only be leveraged through faculty action. Therefore change will occur at ground level, creating tension and conflict between the strategic imperative and the operational needs of the university (Gjerding et al., 2006). The governance of the entrepreneurial university cannot be reduced to merely financial measures and the imposition of a profit making, performance management culture. Instead it must look to dynamically evolve its traditional missions of teaching and research at the faculty level to accommodate external challenges, be they economic, social or political (Bratianu and Stanciu, 2010).

The dynamic and divergent nature of entrepreneurial university governance may cause changes to internal structures, impact collegiality and invoke managerialism leading to tension between the university executive and academia. As such, the research extends the arguments of Münch (2014) where decision-making structures within universities are based upon historical priorities and previously leveraged and deployed capabilities. Governance is a hegemonic-grounded process within the university, creating a continuous tension manifest in dynamic and divergent internal structures.

4.3 The Ontological Challenge of Marketisation on Academic Identity

As universities become more entrepreneurial and entrepreneurial activity and culture is normalised across university campuses academics may accept, at an epistemic level, the ensuing change as a form of innovation. However, academics are likely to resist the change in personal identity to that of being an entrepreneur, as opposed to a scholar, thereby creating an ontological challenge (Barnett, 2005).

The ontological/epistemic contradiction for academic identity and the consequences for university legitimacy were identified through a grounded theory analysis of newspaper reports. The following section documents the findings of this analysis aligned against a critical realist framework describing events, experiences and causal mechanisms.

4.3.1 *The Experience of Academic Identity (Critical Realist Empirical Layer)*

Two perspectives (critical realist experiences) have been identified from the grounded theory analysis that characterise the challenges for academic identity in a market-led university sector. These are: a conflict of interest may exist between academic and commercial responsibilities; and secondly, commercially focused academics may limit public access to their research and knowledge.

4.3.1.1 Conflicts of Interest may arise between Academic and Commercial Responsibilities

As a university becomes more entrepreneurial in outlook, the academic role may change as the requirement to take on external responsibility is increased. The need for the academic to commercialise their Intellectual Property Rights (IPR) and become involved in strategic renewal will intensify (Yusof and Jain, 2010), raising the possibility that “research findings are corralled by propriety restrictions or commercial constraints.” (The Guardian, 3/4/2012) ⁵⁵

Academic entrepreneurialism may conflict with the traditional missions of the university as academics are driven to act outside their core contractual responsibilities. Laukkanen (2003) found that entrepreneurialism per se is not negatively viewed by academics, rather it is the

conflating of responsibilities and priorities when academic and entrepreneurial objectives are combined that trouble the academic.

The analysis found that collaboration between industry and the university creates a significant risk to academic integrity because industry is highly likely to be the more powerful partner, with commercialising values and market imperatives taking priority over academic freedom (Guthrie and Washburn, 2005). The moral procedural legitimacy of the university may be impacted if independence cannot be demonstrated over external influence:

Of course, industry funding of research has been commonplace since at least the heyday of Big Tobacco, and is still de rigueur for pharmaceuticals, among others. It's almost impossible to imagine a bias-free study with industry cash behind it. (The Guardian, 30/7/2012) ¹⁹¹

The analysis highlights that close relationships between academia and industry might be normalised through discourse. The university's cognitive legitimacy may be compromised if the public sees a university and an external partner as a single, interconnected organisational entity. This risks conflating academic values with a market-led ethos, challenging an important aspect of academic identity: independence. The news media reflects the close relationship between academia and industry. For example the relationship with the energy industry:

Frackademia has become the preferred term to describe new partnerships forming between academia and the fracking industry. (The Times Higher Education Supplement, 19/9/2013) ⁷⁵

The analysis identified that it is not only close external relationships that impact a university's independence. The news media highlights an increasing tendency for activist organisations or lobby bodies, to aggressively oppose certain university research findings that fail to align to their own interests. Moral personal legitimacy may be lost if a university's right to advocate, based on sound academic research, becomes constrained.

For some members of the public, advocacy seems to inherently compromise faculty objectivity. (The Times Higher Education Supplement, 19/9/2013) ⁷⁵

The analysis found that as universities become increasingly beholden to external influence, they might choose to adopt different, more commercially orientated, cultural values or operational approaches. This may prioritise profit over learning and directly impact moral procedural legitimacy. This may lead to an adverse impact on academic identity that will likely lower morale within the academic community.

Demoralised and increasingly corporatised universities look to their business schools to understand how to be respected in the world of markets. (The Times Higher Education Supplement, 12/2/2009) ⁸³

Like many professions, the identity of the academic is grounded in the image, prestige and reputation of the institution to which they belong (Fuller et al., 2006). In a market-led environment universities will look to exploit their reputations for commercial gain. The news media reflects that the prestige of the university might be compromised through its commercial collaborations. This may have an adverse affect on academic identity impacting moral personal legitimacy:

"They're trying to buy the prestige of the university. And the universities are happy to sell their prestige." Thomas McGarity, a UT-Austin law professor. (The Guardian, 30/7/2012) ¹⁹¹

However, the analysis identified an alternative perspective that views academics as empowered and self-motivated by entrepreneurialism. D'este and Perkmann (2011) argue that academics are not driven by the benefits of commercialisation (monetary reward, IPR) alone when deciding to engage with industry rather they consider broader incentives including: the ability to learn from industry; accessing industry resources including applied expertise; and accessing research funding from industry and government. Academics will in general, prioritise collaboration with industry if they can progress their research objectives, whilst industry will prioritise collaboration if economic opportunities can be created. This creates a tension, a conflict of interest, between commercialisation and research. Output focused collaboration such as patent generation and spin-off creation activities are likely to be preferred and driven by industry, whilst collaboration based on research-centred investigation is likely to be preferred by academics. Academics are only likely to engage enthusiastically with industry when their research objectives are being met.

In sum, notwithstanding motivation to further their own research, the conflicts-of-interest experienced by academics in collaborating with industry may be perceived by the public as compromises to academic integrity. This ranges from being beholden to powerful business interests, lacking independence or merely prioritising entrepreneurial activity over teaching activity, all of which may impact the moral consequential legitimacy of the university.

4.3.1.2 Market-led Academics May Limit Public Access to New Knowledge

As academics become more entrepreneurially aware and focused, the knowledge they generate is likely to be motivated by instrumental socioeconomic need. This may reduce the public availability of knowledge in several ways.

The analysis found that teaching responsibilities might be negated in preference for research opportunities. Higher levels of recognition and reward are given to research and external collaboration. Researchers are therefore motivated to focus on the generation of knowledge rather than its dissemination (through teaching). Moral consequential legitimacy may be compromised when public access to knowledge is constrained in this way. The role of teaching as an element of academic identity is likely to be marginalised by “the persisting inability to raise the status of teaching in comparison with research.” (The Times Higher Education Supplement, 31/1/1997) ⁷⁰

Secondly, the analysis found that certain academic subjects such as the humanities and the arts, not deemed appropriate for industry collaboration, might suffer from a lack of investment leading to an eventual decline in interest. Academics may favour “teaching only those ‘relevant’ subjects that can be boasted about at recruitment fairs” (The Times Higher Education Supplement, 29/7/2010)⁸⁰ Whilst positively reinforcing the identity of those academics with external industry research interests, the decline in non-externally focused subjects may impact cognitive legitimacy, as universities begin to reflect less the sum of all human knowledge and more the needs of profit driven industrials.

Finally, the analysis found that opening up universities to commercial opportunities might increase university collaboration with industry on societal challenges. This risks de-emphasising the tradition pursuit of knowledge for knowledge’s sake. However, highlighting the outcomes of research, the end products that will make a difference to society, should gain public support and help build moral consequential legitimacy. Academics will be attracted to such initiatives for the

profile they offer, reinforcing their academic identity. This may pressure the academic to choose such research with 'good deed' potential: "scholarship for its own sake is less interesting than scholarship that contributes to effective action in the world." (The Times Higher Education Supplement, 3/1/1997)⁷¹ However, this may reduce involvement in less practical, but no less worthy subjects.

In addition to reducing scholarly focus on subjects deemed non-commercial, the analysis found that increased academic focus on industry collaboration will further reduce public access to knowledge as academics look to protect their intellectual property rights (IPR) for commercial gain (Link et al., 2007). This emphasises pragmatic exchange legitimacy over moral consequential legitimacy. Academics are increasingly likely to delay or avoid publication of their research in academic journals to protect potential revenue streams, raising a further conflict of interest between their university role and private activity:

Universities have long struggled with conflicts of interest arising from contract research, particularly demands for secrecy of industrial patrons eager to stay ahead of the competition. (The Times Higher Education Supplement, 4/12/1998) ⁸⁷

However, working with industry may allow academics to explore new areas of knowledge. Consulting activities undertaken by academics can take many forms and allow the academic to pursue external income streams whilst furthering their own personal learning. This allows academics to maintain the integrity of their personal academic identity whilst pursuing entrepreneurial goals (Murray, 2002). The analysis found that entrepreneurialism is not just about leveraging commercial opportunities. It is often thought of as doing new things in new ways that builds moral procedural legitimacy and as such aligns to innovation and academic freedom to innovate:

If you give them the flexibility to implement a strategy as they see fit, then you are much more likely to be successful because you're appealing to people's values and skills and they have the freedom and motivation to do what they want. (The Times Higher Education Supplement, 21/1/2016) ³

In sum, academic collaboration with industry may limit the transfer of knowledge from the university to the public domain, as the commercial interests of both the academic and industry partner take priority over the demonstration of scholarship. This 'knowledge filter' may impact

moral consequential legitimacy where society perceives that the high level of public investment in university research does not lead to a significant public benefit or socioeconomic growth (Ghio et al., 2015).

4.3.2 *The Events of Academic Identity (Critical Realist Actual Layer)*

Grounded theory analysis identified two events that characterise the changing nature of academic identity in a market-led university sector. These are: the increasingly aired opinion of a public distrust in experts; and secondly, the emergence of new career opportunities for academics.

4.3.2.1 Public Mistrust in Experts

In recent times sections of the public have been encouraged to question the opinions of those individuals and institutions traditionally considered as experts or leading voices in their chosen sphere. Academics for whom the public has “entrusted its future in the form of large segments of its youth” (Bird, 2013: 33) have a significant element of their identity grounded in this public faith. The analysis found that attempts to undermine the public trust in experts might have direct consequences on academic identity, for both the individual scholar and the university:

For many academics in the UK, one of the most upsetting aspects of the Brexit debate has been the growing mistrust of experts. Brady describes this “disdain” as deeply problematic, but points out that universities are facing a similar backlash “in the world of Trump” on the other side of the Atlantic. (The Guardian, 9/5/2019) ⁵⁴

University/industry collaboration may feed public distrust in academics. As society becomes more dependent on information and innovation for economic and social growth, universities through collaboration with industry and government are undergoing a “cultural transformation” to contribute to the knowledge society as “Professors of Practice” (Etzkowitz and Dzisah, 2015: 10). The analysis found the role of the academic is increasingly becoming one of a broker between different external stakeholders that blurs academic boundaries and impacts moral procedural legitimacy, as transparency is compromised. The lack of transparency regarding sponsorship and involvement in research may raise doubts concerning the independence of research findings, creating further distrust:

The bias built into the impulse to satisfy one's industry masters is often unconscious or carefully rationalised. (The Times Higher Education Supplement, 19/9/2019) ⁷⁵

This academic bias is not only confined to industry relationships. The analysis found that a significant amount of media coverage concerns the *perceived* trend in recent years for academics across all faculties and subjects to ground teaching and research in a leftwing or liberal favoured political context. In addition to social consequences (e.g. intolerance of other political ideologies, limiting free-speech) political favouritism raises questions of academic neutrality leading to trust issues related to academic opinion or research with implications for moral structural legitimacy:

British universities suffer from "group-think" with a strong leftwing or liberal bias among academics and an under-representation of conservative views, a report claims. It argues that the trend poses a threat to higher education because it raises the possibility of future clashes with right-of-centre governments that may strip universities of funding. There is an increased risk of unconscious academic bias and a possible threat to free speech. (The Times, 2/3/2017) ¹⁸⁵

Similarly it has been argued the perceived existence of a left-wing political bias amongst academics may increase resistance to ideas of commercialisation impacting the effectiveness of the entrepreneurial university and a market-led university sector (Shattock, 2010a). Interestingly, the academic evidence countering bias including the natural inclination of the young to be more liberal, whether at university or not (Surridge, 2016), is rarely positioned in the media in relation to university and/or academic reputation. Despite the lack of balance, the risk remains that the perception of academic bias may affect the university's moral structural legitimacy. (The Times Higher Education Supplement, 21/2/2019) ¹⁸⁶

Finally, the analysis highlighted an increasing tendency within public debate and social forum to prioritise opinion over fact. Based on ideology and emotional belief, rather than proof or scientific rigor, the media creates a perception that an individual's perspective can never be incorrect. This perception may reduce moral personal legitimacy: evidence based learning underpins the academic's need to have "a sense of authority in their subject area" (McInnis, 2010: 156) and once evidence is no longer a requirement of public debate, academic identity and self-worth may be reduced. The analysis found this might be extenuated through the use of

social media as a forum for academic debate that polarises argument and produces emotion, not opinion. (The Times, 24/7/2019) ¹⁸²

In sum, the growing distrust of experts across certain sections of society for reasons of political expediency, transparency of motive and bias, or preference for emotion over fact, will impact the identity of the academic and the university. This trend is likely to impact the reputation of the university and its cognitive legitimacy as well as the moral personal legitimacy of individual academics.

4.3.2.2 New Career Options for Academics

Universities face considerable competition from industry, especially technology companies, when attracting and/or retaining the best academic staff and research talent. The analysis found that the overlap between technology companies and the university has created new career options for academics. Not only this, but academics have also become increasingly aware of the rewards on offer in the private sector, with likely implications on motivation and ultimately academic identity:

Moving to a tech company nets researchers a compensation package three to five times what they could earn at a university. (The Times Education Supplement, 19/7/2018) ⁴

Whilst the financial rewards on offer will undoubtedly attract some academics to industry, this view fails to reflect the wider motivations of academics who tend to prioritise the furthering of their research over personal financial gain, an action congruent with their personal and academic identity (D'este and Perkmann, 2011). Pragmatic exchange legitimacy may drive the setting up of 'spin out' companies external to the university offering academics additional career options, by providing them with a vehicle to pursue their research interests with private finance:

A great attraction of most of these spinouts is that they own their own intellectual property and have been incubated within their university and peer reviewed globally for years before coming to market. (The Times, 14/12/2016) ⁹²

Finally, the suggestion that the best academics will leave universities to pursue a career in the private sector is long established. However, the anticipated 'brain drain' has never fully materialised (Etzkowitz, 2013). In fact, the analysis highlighted the counter argument that the

proliferation of university and industry partnership has created opportunities to move from academia to business and vice-versa, that may in itself provide significant motivation to pursue an academic career. This is further exemplified by the reputational gains of those academics continuing to teach regardless of their management or external responsibilities:

I am always impressed by the alacrity with which some newly appointed VCs say they will carry on teaching ... a decision to maintain at least some teaching confers academic legitimacy. (The Times Higher Education Supplement, 31/1/1997) ⁷⁰

In sum, a circular relationship exists where increased collaboration between academia and industry has raised awareness of career options and personal development paths previously veiled. In fact, new hybrid career choices may have emerged as a result of this collaboration. This brings into question what it means to be an academic in today's market-led university sector. If this new identity creates uncertainty across the wider public as to what an academic is or represents, moral personal legitimacy may be strengthened, but the university's cognitive legitimacy may be put at risk.

4.3.3 Academic Identity Legitimising Mechanisms of the Real Layer

The following section details potential causal mechanisms retroductively derived from the analysis, that may help explain the experiences and events related to academic identity in a market-led university sector. Two casual mechanisms have been identified: the psychological employment contract; and secondly, academic social-capital.

4.3.3.1 The Psychological Employment Contract

A psychological contract is formed between the university academic and industry based on the type of relationship and form of exchange established. Collaborative research with industry is a reciprocal exchange utilising current research experience and typically comes with the support of the faculty. As such it represents an extended investment in the researchers current career path. On the other hand, formal commercial ventures are negotiated, creating transactional exchanges that are external to the researcher's university career. Therefore, different forms of exchange

create different cognitive and relational career contexts for the researcher, which create career agency.

Put simply, the blurring of boundaries between the academic and industry present new career options for the researcher, regardless of whether the academic is entrepreneurially minded or not.

If the psychological contract between university management and academic brakes down (for example, unfulfilled career promises) the academic will look to leverage their industry relationships to extend their career. Lam and de Campos (2015) found that non-entrepreneurial inclined academics will leverage new research opportunities afforded by industry collaboration thereby *increasing* their investment in their university career rather than becoming disengaged. Entrepreneurial-minded academics will leverage relationships and their human capital to establish opportunities *external* to the university. This contradicts the literature arguing that researchers are limited in career agency and “portrays young scientists as victims of the entrepreneurial university” (Lam and de Campos, 2015: 836).

In sum, entrepreneurialism within the university is creating career agency for academics and researchers via hybrid university/industry relationships that create different forms of psychological employment contract. These psychological contracts act as a causal mechanism or structural determinant of academic identity.

4.3.3.2 Academic Social Capital

Retroductive analysis has identified social capital as a potential causal mechanism impacting university legitimacy in relation to academic identity. Academic identity is influenced by the acquisition of resources that shape career development, resources that are often dependent on the academic’s social capital (Maritz and Prinsloo, 2015).

An academic’s social capital is a product of the individual relationships within the academic’s social and professional network (Lin, 2017). Social capital will be contingent on the capabilities and personal traits of individuals, mutual trust, empathy and a sense of shared identity (Portes, 1998). Activity related to social capital is typically open ended and infrequently formalised in contracts or legal agreement. Social capital is critical for the transfer of tacit knowledge through discussion and argument. Such tacit knowledge may be difficult to externalise without such

collaboration and therefore will not be easily transferred across different organisations, geographies or cultures (Walker and Yoon, 2017).

An academic's access to social capital will be influenced by the market-led imperatives of the university sector. Firstly, the content or subject of academic social capital, their academic knowledge, will influence the characteristics and power of social capital. As academic knowledge becomes less theoretical and abstract, due to university entrepreneurialism and market-led imperatives, knowledge will increasingly focus on practical issues and real world challenges (Trowler, 2001). This will drive the importance of cross-discipline relationships and external collaborations in the formation of social capital.

Secondly, as governance mechanisms become less dependent on localised forms of control and more determined by transnational and global institutions "weak ties" will increasingly facilitate social capital rather than "thick social relationships" (King et al., 2011: 425). This will deemphasise the physical aspects of social capital in favour of virtual relationships based on social media and the Internet.

Thirdly, the leveraging of social capital in market-led environments may encourage an "overt opportunism" (Gianiodis et al., 2016: 609) where academics sell and capitalise on their research privately rather than through university channels. Universities may be willing to let this happen, as the reputation and presence of such academics often enhances the overall prestige of the university and they are therefore nervous to risk the university brand by challenging the academic's intellectual property rights.

Finally, market-led environments may exacerbate the negative effects of social capital relationships. Social capital is based on the traits of the individual and not on the strength of the network. Unlike network theory, establishing a relationship based on social capital does not guarantee the connection will be successful, as individuals may become locked into bad relationships (Witt, 2004). Furthermore, the extended use of social capital may promote inequality (Cross and Lin, 2008). Social capital is historically and institutionally formed favouring individuals with historic and institutional power (e.g. men). Also, minority social groups typically leverage connections based on their shared characteristics (for example, gender, ethnicity) thereby limiting their access to wider networks where their social capital can be engaged.

In sum, a market-led university sector is changing the nature of academic social capital, and thereby power, by focusing it on instrumentally driven practical knowledge, more non-faculty collaboration and weak relationship ties facilitated by virtual globalised connections. As such social capital as a causal mechanism will influence academic identity by further blurring the lines between the theoretical and the applied, the internal and the external, redefining moral personal legitimacy.

4.4 The Economic Sustainability of the Entrepreneurial University

Driven by market led principles, the UK university sector like many across the globe has undergone a rapid expansion in student numbers over the last 20 years. This expansion has changed many of the economic fundamentals upon which the sector is based and brings into question the future financial sustainability of the university.

The '*economic sustainability of the university*' is a theoretical concept that emerged through a grounded theory analysis of newspaper articles considering the legitimacy of the entrepreneurial university.

To understand better the economic sustainability of the university and the associated impact on university legitimacy the following section documents the findings of this grounded theory analysis, aligned against a critical realist framework comprising experiences, events and causal mechanisms.

4.4.1 *The Experience of University Economic Sustainability (Critical Realist Empirical Layer)*

Grounded theory analysis of newspapers articles related to the '*economic sustainability of the university*' has yielded four critical realist experiences (value judgements). They include: university sector oversight may be inadequate; the value of a university education is today questionable; a university's entrepreneurial success may have been conflated with expansion; and finally, accepting funding donations may come with risk.

4.4.1.1 Oversight of the University Sector may be inadequate in the light of Marketisation

For a period of four decades, post World War Two, ensuring the quality of universities was predominately the responsibility of national government. The university sector balanced the need for academic autonomy against government policy that was effectively structured as "university nationalisation" (Luescher-Mamashela, 2010: 265). This form of oversight was to come under pressure from massification, globalisation and the proliferation of new higher education suppliers (Scott, 1995).

Concerns were identified in the analysis about the adequacy of oversight across a market-led university sector. As expanding participation increases not only the number students but also the number of higher education providers, quality regulators face the dual problem of ensuring existing universities maintain quality under increasing capacity pressures and that new providers meet the standards and expectations currently set. A shift from elite to mass education, whilst retaining firm control on that expansion may be especially problematic (The Times Higher Education Supplement, 20/10/1995) ⁸²

The increase in student numbers has led to a rise in the number of new suppliers of higher education services, both domestic and overseas, seeking to leverage the new economic opportunity. The moral consequential legitimacy of the university may become compromised as more providers entering the university sector are empowered to award degrees. The consistency of accreditation becomes a risk raising the possibility that standards will fall as universities, desperate to attract new students, take advantage of regulatory body constraints concerning quality control:

The Government is preparing a crackdown on the rapidly increasing proportion of top degrees being awarded by universities, amid fears that the value of higher education is being eroded. But a sharp rise in the number of students receiving first class and 2:1 degrees has prompted accusations that higher education standards may be falling, especially as universities compete for undergraduate talent. (The Independent, 16/8/2017) ¹⁹²

The analysis found that regulatory limitations are also present on the global scale. The shift to mass education, itself a response to an increasingly global economic environment (Dill and Beerkens, 2010), brought with it increased global competition across the university sector. As higher education operates in a global market there is a need for global regulations and a transnational enforcement agency, which may be lacking:

There is a lack of central authority for the accreditation of qualifications that address equivalence across countries, technical subjects, professions, academic and age: providing consistency in different contexts. (The Times Higher Education Supplement, 23/12/2005) ⁷⁴

Global accreditation is complex. A university sector that is global and market-led is “composed of a complex and growing web that includes: intergovernmental agencies; national quality assurance agencies; civil society and commercial organisations” (Dill, 2011: 440). This complexity and informality risks moral procedural legitimacy as reduced university sector oversight provides opportunity for unscrupulous suppliers motivated by profit and with no regard for the reputation of the sector as a whole:

More than 30 fake universities have been shut down by the Government following a crackdown on worthless degrees, it has emerged. However, the UK is powerless to act against roughly 80 per cent of offenders because they are based outside the country and cannot be prosecuted, according to Prospects, the graduate careers expert. (The Daily Telegraph, 3/8/2016) ⁹⁷

In sum, ensuring the quality of existing universities, as increased participation puts pressure on resources, is only one of the challenges faced by regulators. Regulators must also warrant new universities meet current standards and identify unscrupulous providers. The global orientation of the university sector and the limited presence of global governance, further complicate this. Without sufficient quality assurance the economic sustainability of the university cannot be guaranteed as confidence and demand is potentially eroded, putting the moral structural legitimacy of the university at risk.

4.4.1.2 The Value of a University Education is Questioned

For many years there has been an acceptance that a university education confers with it enhanced career prospects and salary earning potential over those who don't attend university (Dearden et al., 2005). However, the expansion in student numbers across the university sector has led to a proliferation of graduates and as with any increase in supply of a given commodity, the value of a degree qualification has been challenged with some believing the benefits accrued fail to cover incurred costs such as student loan interest (Kemp-King, 2016).

The analysis shows this perspective is being increasingly expressed in news reports and the media, affecting the moral consequential legitimacy of university by supporting the public perception that the value of degree is diminishing, especially when the emphasis falls on instrumental salary returns.

Driven by the voices at the heart government which focus on marketisation and value for money, and on the value of a university degree being judged purely on the falling salary you come out with. (The Guardian, 9/5/2019) ⁵⁴

The news media highlights that the diminishing value of a degree is leading to questions regarding the investment in higher education and if the money could be better spent elsewhere. This is creating the need for increased pragmatic exchange legitimacy. The ‘opportunity cost’ of a university education has been identified in the analysis, suggesting that potential students may be better served following other career options.

We spend billions every year lending young people £9000 a year to go to university. Why not offer an entrepreneurial alternative? We could lend anyone under 25 the same £9000 a year to set themselves up in business and, much like student loans, they would only have to repay it once they hit a certain level of profits. (The Daily Telegraph, 30/1/2018) ⁵¹

The analysis found the question of return on investment becomes even more pronounced when considering the value of specific university subjects or courses:

Departments such as Philosophy are facing increasing pressure for survival, as students begin to prioritise instrument returns from their university investment in the form of better career prospects (e.g. Middlesex, 2010) (The Times Education Supplement, 29/7/2010) ⁸⁰

Although if student demand is there, market driven mechanisms supporting pragmatic exchange legitimacy (i.e. tuition fee revenue) will likely provide courses and degrees regardless of graduate salary expectations or societal value:

Graduate skills are being decided by student demand. If a student wants a degree in sports journalism, the university will provide it. The funding model even encourages it. (The Times, 6/10/2018) ⁹³

The analysis also found that when the financial returns from specific universities are highlighted, bringing into question university access (the selection criteria applied by certain universities),

issues relating to social mobility and social justice begin to emerge with potential implications for moral structural legitimacy:

The financial rewards of a degree from an elite university are revealed today, in a report, which estimates that an Oxbridge graduate will earn an average £10,000 more every year of their lives than a graduate of a non-Russell Group University. (The Guardian, 9/10/2015) ⁹⁴

Consequently, whilst it is impossible to eliminate political bias from newspaper reports and recognising that such bias is more likely to reach readers sharing similar values rather than those opposing (Haselmayer et al., 2017), certain ideas will permeate into the public conscious regardless of the political context in which they originate. For example, an article critical of the newly elected UK Conservative government in 2015, highlights how limited equity in university access may resonate more widely across the public:

Higher education for most, if not all, is under threat due to the increasing gulf between the top universities and the rest: a real university education and higher education-lite. (The Guardian, 2/6/2015) ¹⁹

Therefore, doing the right degree at the right university goes some way to maintain the value of a degree for those students with the right access. The analysis highlights that admission to such elite universities is limited and selection often based on criteria other than academic achievement. This may impact moral structural legitimacy with an inevitable consequence that wider participation may lead to the reification of a “two-tiered system of schooling for privilege” (Perrucci and Wyson, 2006: 887).

In addition to considering the value of a degree from the student’s perspective, the analysis highlighted that the value of a degree has been questioned from the taxpayer’s point of view. For example, the question of how hard students work at university has been raised when analysing the cost of funding universities:

The average student attends the university only for between four and eight hours a week. This leaves 104 hours (not including eight hours’ sleep a night) of free time. Of course, a lot of this time should be spent on our studies. In reality, though, many

students do the bare minimum – perhaps a couple of days a week, sometimes none.
(The Times, 13/2/2008) ⁹⁵

The analysis highlights that this perception may lead to policy change or funding cuts, as the public begin to demand better value for money for services funded by tax receipts, putting increased emphasis on pragmatic exchange legitimacy:

“There has been considerable disquiet over the workload of undergraduates at some of our most famous institutions, so shining a spotlight on the issue may enjoy public support” Nick Hillman, Director of the Higher Education Policy Institute. (The Observer, 31/12/2016) ⁴⁹

Finally, in addition to questioning the effort students apply to their university education, the analysis identified that cognitive legitimacy of the university may be under threat by the further erosion of public trust created by the media perception that employers consider many graduates not to be ready or equipped to enter the workforce:

More than half of employers said all or almost all, graduate recruits started work without vital attributes: such as teamwork, communication, punctuality and the ability to cope under pressure. (The Daily Telegraph, 12/9/2013) ⁹⁶

In sum, the value of a university degree is commonly questioned from two perspectives: are universities effective in educating students in terms of time taken and end product to justify taxpayer investment; and secondly, are all graduates receiving sufficient return from their university investment in terms of enhanced life prospects or just a select few. The economic sustainability of the university is under threat if market-led imperatives erode the value of a university degree. As issues related to economic sustainability become increasingly prevalent pragmatic legitimacy will be eroded, both in terms of pragmatic exchange (for the student) and pragmatic influence (for the public).

4.4.1.3 Conflating Entrepreneurial Success with University Expansion

It has been argued that universities are becoming more entrepreneurial with the objective of “remaining competitive, productive and innovative in the connection between academia and industry” (Corsi and Prencipe, 2016: 18). This perspective focuses on the strategic intent of the

university to define its own path. However, the analysis identified that the entrepreneurial success of a university is often conflated with the increased revenue from student fees that had nothing to do with commercial acumen, innovation or risk taking. Universities are guaranteed a level of success purely by the manner in which government policy has opened up access and increased tuition fees. Universities pretending otherwise, often demonstrated through excessive senior management pay, receive derogatory news media coverage:

He attacked university vice chancellors for ‘congratulating themselves on their supposed entrepreneurial success, they increased their own pay and perks as fast as they increased tuition fees (The Independent, 7/7/2017) ⁴⁰

The argument that strategic entrepreneurial intent plays little role in the financial success of the university is supported by the uncorrelated relationship between the price charged for university services (tuition fees); the cost of provision (wages, buildings etc.); and, the value offered (degree outcomes) demonstrating weak pragmatic exchange legitimacy. The analysis also found that the performance of a university does not depend upon senior leadership although faculty performance may be improved by better management (McCormack et al., 2014). This unsupported relationship is increasingly highlighted in the analysis:

The researchers found no evidence for a causal link between vice-chancellors’ pay rises and the performance of their universities, based on analysing six criteria including expanding student numbers, the popularity of their institution, their league table positions and research excellence. (The Daily Telegraph, 6/6/2018) ⁹⁸

Claiming entrepreneurial success, rather than accepting university performance is merely the result of expansion, may increase attention on specific cost and revenue profiles at the faculty and course level. The analysis highlights that if success has been achieved within some parts of the university through strategic intent, the implication is that less popular or costly university services suffer from ineffective strategic management. Cognitive legitimacy is in part supported by the principle that universities are able to justify sustaining those courses and faculties that are not fully financed through enhanced revenue from other areas (Bratianu and Stanciu, 2010). This may be challenged if the effectiveness of entrepreneurial intent is over emphasised.

The analysis highlights that government, overly focused on performance measures, tend to over emphasise entrepreneurial intent. The news media readily reflects the government tendency to

classify niche courses or those with lower expected salary outcomes as underperforming. For example, Peter Scott of the Guardian commenting on the approach of the then universities minister, Sam Gyimah:

Warning some universities – and we all know which ones he was talking about – not to recruit students (the wrong kind, of course) on to courses whose past graduates had had low earnings. In a neat Orwellian touch he added these “underperforming degrees” were giving mass higher education a bad name. (The Guardian, 3/7/2018) ⁹⁹

The analysis found this perception may also extend to overall university performance where demographic, geographic and legacy constraints get ignored in favour of the argument that ineffective strategic management is the cause of poor performance: “To save money and raise standards, the weakest institutions must close.” (The Times Education Supplement, 29/7/2010) ⁸⁰

In sum, conflating entrepreneurial success with university expansion may form the perception that effective management will generate positive university outcomes regardless of the institutional, environment, political or social constraints faced by the university. This may lead to some universities being classified in the news media as *underperforming* rather than *disadvantaged*. Universities that fail to recognise this may create operational inefficiencies (including excessive salary costs) that will impact the moral consequential legitimacy of the university and the sustainability of the sector as a whole.

4.4.1.4 Funding Through Donations Comes with Risk

Donations to universities are an important source of funding and are often critical in the financing of large capital intensive projects such as building infrastructure or establishing new research facilities (Brown et al., 2012). The analysis highlighted the perception in the media that universities, especially traditional universities, are increasingly dependent on external donations:

British universities received £1 billion in donations for the first time last year as they benefited from a growth in US-style philanthropy. Dame Julia Goodfellow, president of Universities UK and vice-chancellor of the University of Kent, said: “Donations are now at record levels, representing an important income stream for universities.” (The Times, 3/5/2017) ¹⁹³

Moral structural legitimacy is in part determined by the social acceptance that things have been done in the right way. As the role of the university donor is increasingly emphasised, the actions of donors will face increased public scrutiny. A reputational association may be formed between the benefactor (university) and donor that may impact a university's legitimacy that extends to historical donations as well as present day. Three concerns were highlighted in the analysis: lack of transparency; donor influence over university policy; and thirdly, historical reputation.

As donations to universities rise, media attention is increasingly focused on the hidden motives of donors, highlighting concerns over transparency and impacting moral procedural legitimacy:

The largest philanthropic gifts in the UK go to education and the number of our donors is rising steadily, so universities must expect to be in the brightest spotlight. (The Times Higher Education Supplement, 10/3/2011) ⁷³

In some instances, the lack of transparency over donations has led to questions regarding the operational legitimacy of certain university processes, for example admissions. The custodial prison sentence for the actress Felicity Huffman (The Times, 13/3/2019)¹⁹⁴ received considerable attention, highlighting the illicit role of donations.

Secondly, the analysis highlighted that transparency is also an issue for larger donations from corporate or state sources. Moral structural legitimacy may be under threat as issues regarding the influence of the donor on university policy and the impact this has on the focus and findings of research emanating from the university, take hold in the public conscience:

The new details about Cambridge's close relationship with one of China's wealthiest political families come as senior professors worry that the donation gave the Chinese government undue influence over the university. (The Daily Telegraph, 8/10/2014) ¹⁰⁰

The analysis reflects that the issue of transparency is particularly acute for research:

Oxford University is to suspend research grants and donations from Huawei amid growing security concerns about the Chinese telecoms giant. (The Times, 18/1/2019) ¹⁹⁵

Finally, the analysis highlights the negative implications of past donations where the historical context fails to meet contemporary social expectations. To maintain moral structural legitimacy a

continuous assessment of historical donation decisions may be required. This may be needed to manage the risk that the university is not seen as profiting from inappropriate sources of income. For example:

In 2017, the university rejected a petition to change the name of its Wills Memorial Building, which was built in honour of Henry Overton Wills III, the first chancellor of the university, whose family made its money from the tobacco industry, which used slave labour. Some also want the university to change its crest, which features Edward Colston, a slave trader. Last year, it was estimated that 85% of the wealth used to found the university had depended on slave labour. (The Guardian, 5/5/2019) ¹⁰¹

In sum, concerns over transparency, donor motives and historical consequence may reduce the flow and acceptance of donations into the university, leading to reduced revenues that may impact the economic sustainability of the university. Additionally, donations to universities that lack transparency or historical donations that no longer satisfy contemporary sensibilities will have moral implications that may impact the university's moral structural legitimacy.

4.4.2 The Events of University Economic Sustainability (Critical Realist Actual Layer)

Grounded theory analysis has identified two events that demonstrate that the economic sustainability of the university is at risk in a market-led university sector. The events identified are: the significant levels of university borrowing to finance university expansion; and secondly, the increased dependency on revenue from overseas students.

4.4.2.1 Universities have significant non-teaching costs financed through borrowing

The analysis found the increase in student numbers has forced the university to increase its commercial activity in the provision of building infrastructure, teaching facilities and student accommodation. The media portray that this has led to a considerable increase in university spending on campus facilities and increased scrutiny on estate management:

Some university estate departments may need to work much harder to pull in income and justify their institutions spending large amounts of money to improve facilities. (The Times Higher Education Supplement, 14/1/2016) ¹

The analysis identifies that the expectations of students with regards to their educational environment and the services provided, especially with regards to student accommodation, has increased significantly. Research has shown that students may be willing to pay extra for better accommodation and show preference to those universities offering upgraded facilities (Oppewal et al., 2017). Recognising this, universities have invested heavily and this is reflected in the analysis where subsidised residential accommodation is often referred to as a 'sweetener' to attract students. (The Times, 27/6/2014) ²⁴

However, to finance improved infrastructure and facilities, the analysis emphasises that some universities are taking on debt. Often this debt is being secured on future income streams, predominantly centred on potential student tuition fees. The news media reflects that if this revenue stream decreases highly leveraged universities may come under great financial pressure:

The balance-sheet expansion is dramatic. Five universities have doubled their borrowings in just the last academic year. These are Southampton, University College London, Glasgow, Heriot-Watt and Imperial College London. Imperial is the biggest borrower in the sector, with bank loans and other external borrowings amounting to £470 million in the last academic year. The explanation for this spike in borrowing is a rise in investment spending, specifically in building new facilities and expanding accommodation for students. (The Times, 4/1/2019) ¹⁰²

The news media reflects that unlike commercial companies, the ability to refinance debts and undertake organisational restructuring is limited:

Debt laden universities need to tread carefully, universities have no share capital and 'failure' can be handled only by absorption into another entity. (The Times, 4/1/2019) ²⁴

Also, current government policy, grounded in market-led principles, seems unlikely to offer much assistance to failing universities:

Universities should not assume they will be bailed out from a financial crisis, according to the head of the higher education regulator in England, who likened them to overconfident banks before the global financial crisis. Sir Michael Barber, the head of the Office for Students (OfS), said the regulator would only act to protect the interests

of students, and warned that failing institutions would not be propped up. (The Guardian, 6/11/2018) ¹⁰⁴

The analysis highlights the media often perceives the market-led university to be fully capable of achieving operational success through strategic intent. Thus operational failure is deemed to be the result of bad management, rather than structural pressure. As such badly managed universities should be given limited public support:

If the higher education market is to succeed, *bad* universities must be allowed to go bust. (The Daily Telegraph, 3/11/2018) ¹⁰⁵

However, the analysis does highlight this hard-line approach may only apply to certain universities. There is an acceptance that low quality universities may fail, and should in fact be allowed to fail. The definition of *low quality* is not explicit but rather than referring to the exposure to debt and financial leverage, the implication is that low quality universities offer non-traditional, non-academic degrees and are hence better represented by post-1992 universities rather than the elite, Russell-group institutions. Thus reinforcing hegemony of elite universities over the rest:

Risk-taking universities offering low-value degrees should not be able to rely on the treasury as a lender of last resort. (The Times, 4/1/2019) ²⁴

The failure of one or more universities may lead to a contagion across the higher education sector similar to that experienced by the financial sector in 2008. As leveraged universities borrow from a limited number of sources, debt is interconnected and credit worthiness often assessed at the sector rather than institutional level (McGettigan, 2013). The analysis highlighted the increasing attention on the sector-level consequences of university bankruptcy:

Loans deals, many of which were signed in the euphoria following 2012 – when colleges, suddenly awash with student loan cash, made a dash for growth – add another layer of cost. Unfortunately, debts that were once deemed affordable might not be in the next few years as annual budgets come under strain. (The Guardian, 10/11/2018) ¹⁰³

Alternatively, it can be argued that taking on manageable debt is merely part of an entrepreneurial risk process, required if universities are to innovate and grow. Universities in a

market-led environment will naturally risk their capital, whether financial, reputational or intellectual, in order to stay competitive. Risk is a continuous process that leads to continual internal change and adaption (Barnett, 2010).

In sum, concern over the level of university borrowing is increasingly highlighted in the analysis. Driven in some part by universities copying the strategies of other universities that have successfully expanded and influenced by government policy, this may lead to prescriptive responses from universities that fail to reflect the unique environment and contextually dependent characteristics of the individual university (Trakman, 2008). Taking on excessive borrowing that fails to take account of a university's specific context and capability to repay will place not just the individual university at risk through reduced pragmatic exchange legitimacy, but endanger the cognitive legitimacy of the entire sector as the public accepts the transient nature of once permanent institutions.

4.4.2.2 University Dependency on Revenue from Overseas Students has increased

Universities face tuition fee caps for domestic students constraining revenue potential. No such constraint applies to overseas students, where universities are free to charge market-led rates for tuition. This has encouraged certain UK universities to follow strategies targeting the recruitment of overseas students (Börjesson, 2017).

The analysis identified that non-European Union students are especially coveted (The Times Higher Education Supplement, 18/10/2012) ⁷⁷ as there are no restrictions on the fees they can be charged. Whereas, European Union students under freedom of movement rules can apply to attend any university in a European Union country, under the same terms that apply to a country's domestic residents. The ubiquitous recruitment of overseas students by UK universities is recognised in the analysis, emphasising the rewards on offer:

International students are a lucrative source of revenue for universities. Institutions can charge only £9,250 for British students, but double or treble that for those from outside the EU. Bristol University is offering a BSc in biochemistry that is open at present only to international students. It charges £22,300 a year. Bristol had 241 courses available to international students on Friday, compared with 134 for those from the UK. (The Times, 12/8/2019) ¹³⁶

The news media also readily emphasise the growth potential of overseas student numbers:

Official figures from leading universities, including Oxford, Cambridge, Durham and Birmingham, show the number of international undergraduates has jumped from around 39,000 in 2005/2006 to over 75,000 in 2013/2014, the last figures available. (The Daily Telegraph, 29/5/2015) ¹⁰⁶

However, the analysis reflects several practical contentions about the recruitment of overseas students. The first contention relates to domestic students being marginalised or 'priced-out' of domestic universities. The increase of external student 'inflows' driven by the potential profits to be made from charging overseas students higher fees risks restricting domestic student access to local higher education:

The number of foreign students at the UK's elite universities has nearly doubled in less than a decade, as concerns emerged that foreign students are "squeezing out" British applicants. (The Daily Telegraph, 29/5/2015) ¹⁰⁶

A second contention raised in the media is the risk of prioritising revenue ahead of quality. Extenuating the fear that domestic students may be marginalised, the analysis highlights the accusation that some universities may lower admission requirements for overseas students. This may have implications for educational quality as universities try to accommodate less able overseas students:

The investigation also showed that thousands of overseas students are being granted fast-track admissions without needing to take A-levels or an equivalent, instead completing a six-month foundation course. Former education minister Lord Adonis said the findings were 'seriously alarming' and a 'betrayal of the mission of universities' while Sir Anthony Seldon, the Vice-chancellor of the University of Buckingham said such discrimination, if proven, would be 'very wrong.' (The Daily Telegraph, 6/8/2017) ¹⁰⁷

A third point of contention relates to the integration of overseas student needs into the UK university curriculum. Despite focusing on the recruitment of international students, the news media highlight that UK universities have failed to fully adapt their degree course content, teaching methods or composition of teaching personnel, to reflect the needs of the new and expanding cohort of international students (Warwick and Moogan, 2013). The analysis highlights

the risk that UK universities do not have the capacity or finances to successfully exploit overseas markets without compromising its domestic market:

Alongside the economic rationale for recruiting international students, universities normally argue that these students diversify the student body and broaden not only their own horizons but also those of home students. But it is precisely this diversity that gets overlooked in the admissions process. The purpose of education and what counts as success in education differ considerably across cultures and countries. (The Guardian, 13/11/2012) ¹⁰⁹

The poor integration of international students studying in the UK is most readily identified through language issues. Linguistic capability for non-English speaking students may constrain their ability to fully engage in degree level content and concepts, creating a variance in student cohort abilities. The analysis found that widening the capability gap across a student cohort might reduce the overall performance of the cohort including domestic students:

Figures released under the Freedom of Information Act show that almost 66 per cent of institutions across Britain are awarding places to undergraduates whose language skills are no better than “competent”. Experts tasked with setting English tests suggested that the standard used to dictate entry to many universities was not good enough for academic courses. (The Daily Telegraph, 24/8/2012) ¹³⁶

In sum, the recruitment of overseas students provides a significant revenue stream for UK universities and is becoming increasingly important to the economic sustainability of the sector. However, securing overseas revenue is not without its challenges. Pragmatic exchange legitimacy of the university may be undermined if domestic students are marginalised, lowering standards to encourage overseas recruitment. Increasing the recruitment of overseas students whilst failing to internationalise the curriculum or fully integrating overseas students into university life, may also impact moral structural legitimacy.

However, even if these contentions can be resolved and pragmatic legitimacy protected, the recruitment of overseas students faces two further external challenges: government’s capricious immigration policy; and secondly, the threat of competition from overseas institutions.

Firstly, the analysis highlighted government immigration policy, crucial to the recruitment of overseas students, has been extremely volatile over the last seven years. Initially, news media readily reflected that universities found themselves caught up in the conflation of illegal and controlled immigration, as political pressure led to policies centred on illegal immigration practices in higher education (Milligan et al., 2011). For example:

Ten staff at Leeds Professional College in West Yorkshire were held amid suspicions the college was charging thousands of pounds for admission into the UK for migrants who would either work illegally or disappear into the system, the UK Border Agency said. Enforcement teams will now try to trace all 350 students registered with the college, most of whom were from Pakistan, and remove anyone in the country illegally. (The Daily Telegraph, 4/12/2012) ¹⁰⁸

The analysis reflected such illegal practices were often conflated with general immigration needs, creating a difficult environment for university recruitment. News media often portrayed such policies as a potential trade barrier. When the UK coalition government (2010-2015) considered relaxing some post-study work rules, this was typically reported in the media as an attempt to repair the damage caused to international recruitment. (The Times Higher Education Supplement, 27/2/2014) ⁹

However, the events culminating in the 2016 UK European referendum are often reported as a return to tougher than ever visa requirements. (The Independent, 7/9/2015)³⁵ The analysis identified immigration volatility concerns actuated a war of words between the university sector and government. The news media reflects that this has potentially created an impression that overseas students are no longer welcome at Britain's universities. For example, in consideration of the treatment of Indian students: "they worry they will not receive the welcome that generations of brilliant Indians have enjoyed at UK universities" said Alice Gast, President, Imperial College London. (The Times, 11/11/2015) ²⁵

The analysis suggests a policy vacuum has replaced the volatility in policy that led up to the 2016 UK referendum. This has created uncertainty for the UK university sector, providing an opportunity for foreign universities and represents a second challenge to overseas student revenue streams.

The second challenge identified in the analysis is the threat to overseas student recruitment due to increased competition from foreign universities. The analysis identified that overseas governments are increasingly recognising the competitive importance of universities in an interconnected, globalised, knowledge based society. This has led to a huge growth in investment in tertiary education in countries such as China, South Korea and Singapore (Marginson, 2018). News media reflects this continued investment is leading to significant performance improvements that may challenge the established elite universities in the UK and the US:

One of China's fast-rising universities is on course to rival Oxford or Cambridge as a world-leading research institution, a vice-chancellor has predicted. Five Chinese universities are likely to break into the world's Top 20 within two decades, from which one will emerge pre-eminent, he said. Ed Byrne, principal at King's College London, said that Britain risked losing its position as the world's second strongest university sector. (The Times, 25/11/2014) ¹³⁸

Illustrating this point, Chinese state officials have declared China's aim to become a significant player in the world market for educational services: "By 2049, the country will have become the centre and leader of the world's educational development" says Chen Baosheng, China Minister at the Department of Education. (The Times Higher Education Supplement, 4/1/2018) ⁸¹

This is likely to introduce severe competition to universities in the US, UK and Australia in the recruitment of international students. Combined with uncertainties in domestic policy, this will likely create significant volatility for UK universities. Such volatility is central to the causal mechanisms, discussed in the final section of this chapter.

4.4.3 University Economic Sustainability Legitimising Mechanisms (Critical Realist Real Layer)

The following section details potential causal mechanisms for the experiences and events related to the economic sustainability of the university in a market-led sector. Two casual mechanisms have been identified through a retroductive analysis of newspaper articles and academic literature. They are: student number volatility; and secondly, political policy volatility.

4.4.3.1 Student Number Volatility

A significant factor underpinning the economic sustainability of the university is the continued demand for university places. If the number of students attending university were to dramatically change this would significantly impact the revenues generated by universities. Official figures from 2019 indicate that revenue from student fees and contracts is £18.9billion, amounting to 49% of all university revenue (Bolton, 2019).

The Higher Education Policy Institute report “The Demand for Higher Education to 2030” (Bekhradnia and Beech, 2018) deems anticipated student numbers to be a product of demographics (specifically, the yearly number of school leavers), participation (the percentage of suitable qualified school leavers) and access (the product of willingness to apply and entry requirements). The report estimates that by the year 2030 there will be a demand for an additional 300,000 student places in UK higher education.

However, volatility surrounds these estimates, particularly with regard to overseas students. Firstly, the impact of Brexit will affect student numbers. In 2017/18 there were 140,000 students from the European Union attending UK universities. Students from the European Union are treated exactly the same as UK students in terms of tuition fees charged and access to student loans. If the UK exits the European Union it is reasonable to assume that these benefits will come under threat. It is estimated that this could lead to a fall of approximately 60% in European Union students in the UK (Bekhradnia and Beech, 2018). There are considerably less UK nationals studying in the EU, with less than 2% of UK students studying abroad (Hubble and Bolton, 2019). Therefore the reduction in European Union students in the UK is unlikely to be compensated for by UK nationals remaining in the UK to study.

Secondly, the competition for overseas students is intensifying. UK universities are facing increased competition from established universities in the US, Canada, the European Union and Australia (Choudaha and van Rest, 2018). However, driven by international rankings, a significant number of nations beyond the established players are committed to investing in their higher education infrastructure to support both domestic demand and capture a share of the international student market (Hazelkorn and Gibson, 2017). This is evidenced by the dramatic rise of Chinese universities in the university world rankings (Peters, 2019).

In sum, despite the anticipated growth in UK school leavers over the next 10 years, the effects of Brexit and the increasingly competitive market for overseas students will create a level of volatility in student numbers attending UK universities. The volatility of overseas students will be particularly problematic for the economic sustainability of UK universities as this revenue, in the form of uncapped tuition fees, is highly profitable.

4.4.3.2 Political Policy Volatility

The economic sustainability of UK universities will be affected by government policy direction. In recent years, political activity with regard to higher education has been considerable. This has been partly driven by the frequent changes in government administration (six different government administrations in twelve years) and the consequences of austerity brought on by the financial crash in 2008. This situation has been characterised as “policy overload” by Ball (2017: 3).

Political policy volatility manifests itself in higher education in several ways. Firstly, the balance between mass access to higher education and government affordability may lead to policy volatility. The shift of funding burden from the government to the student via the imposition of tuition fees has aided public finances, but the government is still liable for unpaid loans. By 2049, these are estimated to be 45% of the total loan liability of £473billion (Hubble and Bolton, 2018). If current trends in the expansion of university student numbers continue, the issue of affordability will likely need policy redress with rationing (limiting access to a university education) a possible policy intervention (Bekhradnia and Beech, 2018).

Secondly, UK immigration policy has significant implications for higher education. Concerns regarding the operation of bogus higher education establishments as fronts for illegal immigration have given way to the need to recruit talent to stimulate economic productivity post Brexit. This may have consequential impact on government policy leading to further volatility.

Finally, the value of a university education (the graduate premium) has been increasingly questioned. This has led to a mounting pressure for policies that consider alternative training and educational options for prospective students that may provide better career prospects and improve social mobility. This has led to increased policy emphasis on ‘degree apprenticeships’ and other forms of vocational training (Bradley et al., 2019).

In sum, the causal mechanism, political policy volatility, characterised by political policy conflicts in higher education affordability, immigration control and social mobility, may cause unsustainable economic conditions for the entrepreneurial university.

4.5 The Transactional Relationship between University and Student

As the provision of higher education is increasingly driven by market-led principles, the social values underpinning university life are superseded by economic values. The human relationships between student and teacher that nurtured learning are at risk of being replaced by a scholarship exchange, where knowledge is treated as a commodity assigned economic value so to be easily traded. Under these circumstances “students have been constituted as ‘customers’ a development that further reinforces the idea that a degree is a commodity that (hopefully) can be exchanged for a job rather than as a liberal education that prepares students for life” (Willmott, 1995: 1002).

Envisioning the student as a customer and the university as a supplier a transactional relationship is formed whose attributes can be described by the basic principles of neo-classical economic theory encompassing demand, supply and price. The *‘transactional relationship between university and student’* is a theoretical concept that emerged through a grounded theory analysis of news media considering entrepreneurial university legitimacy.

The following section documents the findings of this analysis aligned against a critical realist framework. The student perspective (demand) is captured as a critical realist experience (student *expectations* of university), whilst the university perspective (supply) is captured as a critical realist event (*what* universities provide). The section closes by describing the causal mechanisms that may influence the interaction between student and university, between demand and supply.

4.5.1 The Experience of Transaction Relationships (Critical Realist Empirical Layer)

Grounded theory analysis identified three critical realist experiences representing the demand-side of the transactional relationship between student and university. These are: the student’s motivation and expectations may be driven by instrumental economic needs, amalgamated student opinion may shape the university environment, and thirdly, issues of legality seem to be more prevalent to student life.

4.5.1.1 Students are motivated by instrumental economic drivers to secure employment

The analysis highlights the perception in the news media that students are increasingly seeing university as a preliminary phase in a wider career development plan, rather than an isolated life experience to be enjoyed before the serious responsibilities of a wage-earning occupation become a necessity (Clarke, 2018). The media perception is that students are prioritising commercial rewards above intellectual status leading to a devaluation of traditional academic values. The analysis highlights that graduates are becoming more like “agent-managers motivated by self-interest aligned to shareholder need”. (The Times Higher Education Supplement, 12/2/2009) ⁸³

The analysis suggests this attitude becomes more prevalent as the graduate job market becomes more competitive. Twenty years ago a university graduate could fully expect to find a quality graduate job with a salary premium above non-graduates. This is no longer the expectation. As a consequence, the analysis emphasises that pragmatic exchange legitimacy is becoming increasingly important as students become more methodical in their university choice and increasingly focused on attainment:

They’re paying a lot and they want to know how they are doing. They’re also more anxious about getting a job, aiming for a 2:1 or a First rather than scraping by. Parents and students need to reassess the situation. “We had to do our research to be able to help our daughter make decisions about where to go and what type of course suits her.” Says Smith. “I had a grant and didn’t think about where my course might take me. You can’t do that now. You need to understand how things work” (The Daily Telegraph, 21/2/2015) ⁴²

In wanting to achieve more at university in order to meet the demands of an increasingly competitive labour market that awaits them upon graduation, as well as being acutely aware of the high price they pay for a university education, today’s students are demanding a greater level of engagement at university. The news media highlights that students have higher expectations of their university environment, characteristics that are encapsulated in wanting to achieve the very best outcomes from their university education to maximise future career prospects:

Potential student priority is to receive the best possible training to maximise their chances of having successful management careers, rather than the pursuit of new knowledge. (The Times Higher Education Supplement, 12/2/2009) ⁸³

The analysis also reflects the importance of the physical environment and living accommodation:

They expect their learning facilities to be state-of-the-art and you can't sell accommodation without smart en-suite bathrooms. (The Daily Telegraph, 21/2/2015) ⁴²

Such expectations are driven by the increased costs incurred by the student. The news media reflects that students are concerned about value for money and are keen to understand how their tuition fees are spent:

Students at Bristol University have signed a complaint that claims the institution has made cutbacks to teaching despite a rise in annual fees to more than £3,000 in 2006. The complaint, signed by 600 fellow students, analyses the university's finances and points out how it has benefited from increased income. "Revenue per student from tuition fees has increased and we simply ask that the quality of our education be improved accordingly," it said, before listing a set of grievances it claims are a result of the university's cost-cutting. (The Daily Telegraph, 10/5/2009) ¹¹⁵

The analysis found that student needs are not limited to the physical environment in which they work or live, or the quality of teaching they receive. The news media reflects the level of debt incurred at university and the uncertainty of securing a good job (in 2013 almost half of recent graduates were in non-graduate jobs) is adding to the pressure to do well. (The Guardian, 11/5/2015) ¹¹⁴

The analysis finds that this has had a negative impact on the emotional wellbeing of students leading to demands for universities to address non-education needs such as counselling. As such, the media reflects that well-being services are becoming increasingly important to a university's moral structural legitimacy:

The students who occupied the London School of Economics also wanted more therapy: "We demand ... the removal of the standard six-session cap." And on OccupyKCL's list of demands, nestled between "ethical investments" and "free education", is this one: "A

permanent additional CBT [cognitive behavioural therapy] therapist.” (The Guardian, 11/5/2015) ¹¹⁴

However, no matter how good the services provided by universities are, in a market where the supply of graduates outstrips demand there is a growing perception in the news media that not all graduates will secure appropriate employment:

Now though, you can have a degree from the best university in the world and its still not enough. (The Sunday Times, 22/4/2018) ²⁹

If pragmatic exchange legitimacy cannot be established students may start to consider options other than going to university. The misalignment between the level of qualification of today’s graduates and the skills required in the real economy is often emphasised by the news media:

The Office for National Statistics claims that a third of all graduates – including scientists – are not in ‘graduate level’ jobs, while many skills are in acutely short supply. (The Guardian, 31/5/2019) ⁵³

Even if a graduate can secure a graduate job the analysis highlights they are still likely to face several challenges. The availability of more skilled workers has led to graduate jobs coming with fewer working rights; higher levels of productivity/commitment are being demanded of graduates, yet graduate jobs are less secure (prevalence of zero hour contracts); and finally, graduates in employment tend to be over qualified with salary levels remaining static or even decreasing (Sotiris, 2012). Accepting these challenges, students are considering employment alternatives such as entrepreneurialism. The analysis identified some students are looking on entrepreneurial endeavours as a primary career choice rather than a last resort and are encouraging universities to provide more entrepreneurial services and adopt a more entrepreneurial culture to accommodate student needs:

Britain is returning to an era when people dreamt of running their own business, though the challenging job market for graduates is undoubtedly also playing a part. Soaring numbers of young people are setting up businesses while studying backed by experts on campus. Gaining entrepreneurial skills has become part of the university experience. (The Sunday Times, 22/4/2018) ²⁹

Interestingly, the increase in entrepreneurial activity and awareness across the student population will undoubtedly permeate into the very fabric and culture of the university, reifying the market-led philosophy that brought about the change in student motivation, from the pursuit of knowledge to maximising future career prospects, in the first place. (Nabi et al., 2010)

In sum, the transactional relationship between student and university is perceived in the media to be driven by students increasingly motivated by instrumental economic factors. This implies that students want to get the best degree possible to further their career prospects, rather than the traditional pursuit of knowledge for personal fulfilment. Students expect universities to provide the facilities to meet this need. In responding to this there is a danger universities will lose sight of the social role of knowledge and enlightenment that sustains the cognitive legitimacy of the university, instead relying on approaches driven by pragmatic exchange legitimacy that may be prone to the vagaries of market-driven demand and supply.

4.5.1.2 Amalgamated Student Preferences Are Shaping University Cultures

In accordance with basic marketing theory, markets deal with aggregated customer preferences. It can be argued that a market-led university sector will consider students as a collective body rather than as number of individuals. This prompts a university to create and position its services to appeal to the largest possible number of customers. Market-led universities appeal to majorities not individuals. This in turn develops the collective nature of the student response and student expectations. The relationship between driving the market and being market driven becomes somewhat circular (Jaworski et al., 2000).

This in some way may explain the conformity in student social expectations that have developed across campus that is reflected in the analysis. Historically universities were considered to be places that nurtured individual thought and expression. Debate between different, often conflicting ideologies, was encouraged in the name of academic freedom and enlightenment. The analysis seems to suggest a shift away from individual forms of expression to a student experience shaped by collective responsibility and uniformity of thought:

Universities are allowing free speech to be curtailed on campuses in favour of “rule of the mob”, the former equalities chief has warned, as he says vice-Chancellors must stop behaving like “frightened children” and take a stand. Trevor Phillips, who wrote the National Union of Students’ (NUS) original “no platforming” policy in the 1970s, said

that it is now being used in an “ugly” and “authoritarian” way. (The Daily Telegraph, 2/2/2019) ¹¹⁶

Tensions between overt political correctness and student protest protecting minority interests have been commonplace at universities for many years and have been frequently reported in the news media. However, the news media reflects that representatives of the collective student body are increasingly “demanding an institution-wide strategy” (The Guardian, 20/3/2019)¹¹⁰ to protect certain minority interests that may deny the interests of the majority or even other minority groups. If such actions are seen to curtail free speech the cognitive legitimacy of the university may be threatened. Examples of such contradictions are regularly reported:

The author of a report into alleged extremist speakers on British campuses has been banned from an event at a university her study strongly criticises. Bristol University cancelled a talk being given by the author of the University Extreme Speakers League Table, in which it was placed tenth. Emma Fox, a research fellow at the Henry Jackson Society, was informed hours before the event - hosted by the University of Bristol’s Free Speech Society - it was being cancelled on security grounds. (The Daily Telegraph, 29/3/2019) ¹¹³

Furthermore, the analysis finds that university management seem overly worried that student protest and activism may lead to negative coverage in the media, which may affect the university’s commercial objectives of recruiting new students and securing funding (Gagnon, 2018). Driven by the need to establish pragmatic exchange legitimacy, this may lead to management responses that are overly conciliatory to student remonstrance. The media reflects the risk of limiting the diversity of opinion regarding contemporary issues (required to maintain a university’s cognitive legitimacy):

Hull University is to reconsider naming its lecture theatre after Jenni Murray, after students protested, claiming that she has made “transphobic” comments. (The Daily Telegraph, 4/12/2018) ¹¹²

And also on historical issues:

An Oxford college will remove a plaque and consider taking down a statue in honour of the 19th century politician and colonialist Cecil Rhodes after protests by anti-racism

campaigners. Students have been calling for the removal of the statue at Oriel College, which they say does not reflect the “inclusive culture” at the university. (The Times, 18/12/2015) ¹¹⁷

The conciliatory approach of university management may be portrayed in the news media as re-enforcing the collective expectations of students for safe spaces, trigger warnings on academic content and the “no-platforming” of those the collective student body disapprove. The analysis found this may give rise to a new group power, a consumer power if you will, that allows students to influence their university experience:

One of the unforeseen aspects of the introduction of market principles to British academic life over the past decade is that fee-paying students have come to see themselves as customers, and as a consequence have grown more ready to assert their rights and voice their dissatisfactions. And if they don’t like the look or sound of something, then the answer for an increasing number of students is not to confront it but demand its removal. As Williams writes: “In today’s marketed and consumer-driven higher-education sector, many students have come to expect freedom from speech. They argue the university campus should be a ‘safe space’, free from emotional harm or potential offence.” (The Guardian, 24/1/2016) ¹¹⁸

In sum, the emergence of a market-led university sector has paradoxically coincided with a shift from individualism to collectivism within the student body. Whether these events are correlated is not for discussion here, what is important is that conformity of expectation for the student experience is receiving a favourable and conciliatory response from university management, fearful of a negative market reaction (falling customer demand) if they don’t concede. This reactionary management style may lead to inconsistency in applying rules, especially where minority interests are prioritised, that may lead to reduced moral procedural legitimacy. Conversely, responding to student pressure and accommodating their needs will strengthen pragmatic influence legitimacy.

4.5.1.3 Are Issues of legality becoming more prevalent in student life?

The transactional relationship between the student and university will highlight contractual factors (both formal and informal) and will manifest as perceived rights for the student and liabilities for the university. Where student rights and university liability are in conflict

contractual disputes, typically over experience rather than rules, will arise that will test the boundaries of legality and may need the intervention of the law courts to resolve (Vollweiler, 2019). Two examples of the increasing influence of legal recourse have been identified in the analysis: a student's perceived right to influence university governance, and secondly, a student's right to express dissatisfaction with the outcome of their university education.

The analysis found that students may be afforded increased rights, or perceive they have increased rights, by virtue of the transactional nature of their relationship with the university. This may manifest itself as a right to protest against the manner in which the university is governed and/or managed. The news media highlight many examples:

Hundreds of angry Bath students and staff have gathered to protest against the generous pay and exit package awarded to the university's departing vice-chancellor, Glynis Breakwell. (The Guardian, 30/11/2017) ¹¹¹

Such student protest may impact the university's moral structural legitimacy as governance processes fail to reflect the needs of all stakeholders:

Students at the University of London are demanding the resignation of their Vice Chancellor, Adrian Smith. In this case the student-led University of London Union claim "Management have lost all legitimacy. The people who run our university represent no one and are elected by no one." (The Independent, 11/2/2014) ⁶²

The news media often present issues regarding university governance against the context of a demanding student body, thereby reinforcing the perception of student rights. Balancing the rights of all university stakeholders is an important constituent of moral structural legitimacy. The analysis finds this may lead university management to actively seek student feedback as part of its management process, emphasising further the perceived rights of students:

In an era of rising fees and falling numbers, student voice is heralded as something of a panacea. And while the idea of harnessing student feedback has been around since the earliest research into constructivist learning, the feedback bandwagon has rolled into most UK campuses in recent years. (The Guardian, 3/1/2014) ¹¹⁹

The students right to influence university governance is predominantly executed as an informal process that helps shape moral structural legitimacy. Student rights concerning the quality of their university education and its achieved outcome are likely to attract more formal attention when set against a transactional relationship context between student and university. This may be influenced by pragmatic exchange legitimacy. The analysis reflects the risk to the university of more formal student action:

An Oxford graduate is suing the university for £1million because he did not get a first class degree. Faiz Siddiqui claims he was the "victim of poor teaching" that cost him the chance of a lucrative legal career. The history graduate alleges the "inadequate" teaching he received on the Indian special subject part of his course resulted in him only getting a low upper second degree when he took his finals in June 2000 instead of a First or high 2:1. (The Daily Telegraph, 21/11/2017) ¹²⁰

The news media reflects the contractual nature of disputes between students and university, reinforcing the importance of pragmatic exchange legitimacy. For example, the 'miss-selling' of a university's reputation, or where a university's marketing material fails to meet the student's expectations of the transaction:

Pok Wong, 29, is seeking more than £60,000 in damages from Anglia Ruskin University for breach of contract and fraudulent misrepresentation. She graduated with a first class degree in international business management in 2013. "The prospectus convinced me that the university was really impressive. But as soon as I started in 2011, I realised there were failings," she said. "I hope that bringing this case will set a precedent so that students can get value for money, and if they don't they get compensated. Anglia Ruskin talked a good talk, but then didn't deliver." (The Times, 21/3/2018) ¹²¹

Conversely, the transactional relationship between student and university may encourage disreputable behaviours on the student side. Studies have shown that practices such as bribery may be perceived as culturally acceptable when set against market-led practices such as contract bidding and the imposition contractual fee and loan arrangements (Lien, 1986). Such activity may affect the moral personal legitimacy of the university through implication by questioning the reputation of academics involved. Examples of such behaviour have been identified in the analysis. (The Independent, 23/4/2013) ⁶¹

In sum, the transactional relationship between the student and university will likely lead to a greater awareness of the contractual obligations, both formal and informal, between the parties. When these obligations are not met redress may take the form of litigation. Whilst the outcome of litigation may in fact reinforce legitimacy, the publicity surrounding it is likely to affect the reputation of the university impacting moral structural legitimacy.

4.5.2 The Events of Transaction Relationships (Critical Realist Actual Layer)

The following section considers the university perspective (supply side) of the transactional relationship between student and university. Grounded theory analysis identified a university's response to the needs of its customers, the students, is encapsulated in two outcomes (events): the configuration of the product (e.g. courses and teaching) supplied by the university, and the price mechanism utilised by the university for its product. These outcomes align to the event layer of the critical realist framework.

4.5.2.1 The Configuration of Products and Services Supplied by the University

Grounded theory analysis identified the configuration of the product (university courses and teaching) as a significant event (outcome) of the transactional relationship between student and university. The analysis yielded three further properties for the event (configuration of product). They include: a reluctance to change its core offering; a pressure to lower the standards expected from the student; and thirdly, the outsourcing of certain core services. The following section describes the three properties in turn.

Firstly, the analysis finds that the media reflects the university sector as being resistant to change. This may be portrayed by the news media as the university being unresponsive to student needs, being arrogant and relying on a balance of power that favours the university. For example, responding to the findings of the Auger Review, Simon Jenkins comments: "What universities have not done is budge an inch on their own reform. A university course has barely changed its three-year structure of lectures, essays and exams in a hundred years." (The Guardian, 31/5/2019) ⁵³

Echoing this, the universities inability to respond to student concerns over the increased cost of their education is often conveyed in the media:

The challenge instead is for universities to offer shorter, more focused degree courses combining high quality education with value for money that students now crave. (The Sunday Times 9/7/2017) ³⁰

The inability to change will weaken pragmatic exchange legitimacy as student need is undermined in the face of university power. The news media often reflect the university's inability to change as being motivated by the need to control cost to the detriment of quality. This may create a tension between the increasing demands of students (as customers) and an increasing managerial ethos of the university motivated by efficiency:

We are cramming students into our campuses and are at risk of sacrificing quality, not necessarily in terms of instruction but in terms of the overall student experience. Without a doubt, much of the good work that has been done to widen access to universities will be undermined. (The Guardian, 9/5/2019) ⁵⁴

The analysis highlights a need for universities to be more responsive to the needs of its customers in order to build positive pragmatic exchange legitimacy. However, the lack of responsiveness may not be a deliberate strategy, rather it reflects that universities suffer from the problems of all large institutions (hierarchical structure, control centric, conservative culture) and that in fact "universities are not the most entrepreneurial of institutions" (Kirby, 2006: 599).

Secondly, the analysis highlights the pressure to lower the standards expected from the student. There is an acceptance that to maintain its commercial revenues a university must attract new students in increasing numbers and that students will be naturally attracted to successful universities (Palmer et al., 2011).

The standards set by a university are integral to all aspects of moral legitimacy. The news media often present the accusation that universities have relaxed standards to enable more students to achieve better grades in response to student expectations. For example, Simon Jenkins quoted in The Guardian:

"They have upped the quotas of firsts and 2:1s in response to student demand." The Guardian, 31/5/2019) ⁵³

Similarly, the news media highlight the level of academic ability required to attain the highest class of degree is falling. This may affect moral consequential legitimacy, as contemporary degrees are perceived as being less difficult to obtain than those in years gone by:

A major analysis of degrees awarded by 148 universities shows that the percentage of first class degrees has increased from 16 to 27 per cent over the past six years. Meanwhile, the percentage of first and upper second-class degrees awarded has increased from 67 to 78 per cent over the same period. The research, published on Wednesday by the OfS, shows that students who left school last year with CCD or below at A-level were almost three times more likely to graduate with first class honours than they were in 2010-11. (The Daily Telegraph, 19/12/2018) ¹²²

The reputation of the university sector is predicated on producing quality graduates, which is measured by degree attainment. As expansion of the sector through market-led mechanisms has opened up access, it may be logical to assume that the greater number of students attending university will have a greater variance in academic ability that should be reflected in degree attainment. If this is not the case, moral structural legitimacy may be questioned.

Thirdly, the analysis highlights the outsourcing of certain core services. Student expectations with regard to their university accommodation have greatly increased. The media readily emphasise that new commercial providers (e.g. Empiric Student Properties) are entering the market to provide student accommodation and other services, with the express objective of making profit. For example:

The high-end specification of these properties commands higher rent than more traditional digs. High-end purpose built student housing is relatively new only having taken off in the past decade as student numbers have soared. (The Times, 27/6/2014) ²⁶

Such outsourcing, despite being independent of the university may still affect the university's moral structural legitimacy as the supply, regardless of provider, remains the responsibility of the university.

The analysis found that outsourcing might also impact other areas of the student's education. The analysis reflects an increase in the number of students seeking external support in the form of private tutors to help with their university studies. If the increase in private tutoring is linked

to lower teaching standards the university's moral procedural legitimacy may be at risk. The media highlights the concern that inadequate teaching within some UK universities may account for the increase in private tutoring and is often reflected in the analysis:

Mary Curnock-Cook, the former chief executive of the Universities and Colleges Admissions Service said "private tutoring for undergraduates was new and universities should be worried if it in any way reflects inadequate teaching". (The Sunday Times, 19/3/2017) ⁵²

However, the analysis also reflects other explanations for the increase in private tutoring that de-emphasise university accountability, such as cultural changes and the attitude to private tuition across the entire education sector:

Alan Smithers professor of education at Buckingham University said "a generation had grown so used to having private tutors that they could not cope without extra help." (The Sunday Times, 19/3/2017) ⁵²

In sum, the transactional relationship between university and student has consequences for the supply of university services with regard to how those services are configured as a product. The analysis identified three positions related to the university's supply-side product configuration: the university's resistance to change; a pressure to lower the standards of academic attainment; and finally, the privatisation of some university services. The media often present these positions as being tactical (lower attainment), backward looking (resistance to change) and cost driven (privatisation). This may create the impression that universities are prioritising efficiency, rather than investment, as an approach to sector expansion. As such, the transactional relationship between student and university aligns to the concerns of economic sustainability described earlier in the chapter and may emphasise pragmatic exchange legitimacy over the more institutional requirements of moral legitimacy.

4.5.2.2 The Price Mechanism for University Services

In addition to the configuration of the product (university services e.g. courses and teaching) the most important supply-side attribute is the price charged by the university for its services. The analysis identified a price mechanism for university services comprising three interrelated components: tuition fees determined by government policy; the availability of student loans to

facilitate the payment of tuition fees; and thirdly, the loan debt accrued by the student. All three components are interconnected and can be argued, function as a single price mechanism (Britton et al., 2019).

It is important to recognise that if the transactional relationship between the university and student is to achieve pragmatic exchange legitimacy, the price charged by a university for a degree should be recoverable in the extra earning potential the graduate has over non-graduates (the graduate premium). This price should reflect both the initial tuition fee and any interest incurred on loans to pay those fees.

The first issue identified by the analysis recognised that the level of tuition fee charged for a university degree does not typically reflect an entrepreneurial strategy of the university or act as a dynamic market mechanism. This will undermine pragmatic exchange legitimacy. The maximum tuition fee charge in the UK is arbitrarily determined by government policy and is typically adopted by the majority of universities for all courses, regardless of course development cost, student demand or reputation (Bolton, 2017). The news media reflects the ineffectiveness of tuition fees as a market tool for aligning supply and demand for university places. For example, Trevor Harley, Emeritus Professor of Psychology, University of Dundee, quoted in The Times:

Given that, for better or worse, university tuition fees appear to be here to stay, the problem is that they are all set at the same-capped amount. Surely market forces should be used to determine their level. If a university is having difficulty filling its places, it should drop its fees until the places can be filled. It is also ridiculous that every course costs the same, when it is obvious that some cost more to run and some are more popular with applicants than others. If courses are oversubscribed, the cap should be removed. (The Times, 5/11/2018) ¹²³

Furthermore, the news media reflects the imposition of a universal tuition fee across the majority of institutions and courses may have inclined universities to consider students not as individuals with unique educational needs, but as generic revenue opportunities where all students are the same, in as much as they represent £9,000 of potential income:

Universities sold themselves as offering a ticket to life and wealth, and were in a sellers market. They bumped up their fees to the government cap, and invited one and all to apply, with few questions asked about qualifications. (The Guardian, 31/5/2019) ⁵³

The analysis also reflected the lack of differentiation in the provision of university services (courses and teaching) where the generic pricing model fails to reflect the complexity in delivery or the demand (or lack thereof) for the course. This may affect moral consequential legitimacy as course outcomes (student benefit) appear to be independent of the resources needed to achieve them:

At many leading research-based universities, the cost of teaching courses such as business studies, social studies and languages is well below £6,000 a year, the figures show, but all these institutions are charging the full £9,000. The costing released by the Higher Education Funding Council for England, shows the extent to which the fees of students in arts and humanities will be subsidising far more expensive science courses — as well as providing thousands of pounds each in bursaries for poorer undergraduates. They are likely to fuel the debate about whether universities are doing enough to justify high fees. (The Sunday Times, 4/9/2011) ¹²⁴

However, despite the ineffectiveness of tuition fees to act as a mechanism to control the market for university services, the analysis identifies a commonly recognised argument for their introduction: to shift the funding burden from the taxpayer to those who benefit. This emphasises pragmatic exchange legitimacy. For example:

We should not forget however why fees were introduced. They were to remove some of the cost to the taxpayer of university education and transfer it to those who benefit from higher lifetime earnings: graduates. (The Sunday Times, 9/7/2017) ³⁰

Shifting the funding burden through the introduction of tuition fees would not be possible if students did not have the means to pay. To enable payment, a second component of the pricing mechanism: student loans, was identified in the analysis.

Student loans within the UK are available to cover the cost of tuition and living expenses. The system was designed to be progressive and socially just, in as much as repayment of the loan is future income dependent. If a graduate does not achieve a certain level of income the loan does

not have to be repaid and the financing burden falls back onto the state. The analysis found that the high fiscal cost of the student loan system has led to funding pressures across higher education and may impact the future expansion of the university sector (Johnston and Barr, 2013).

In an attempt to improve pragmatic exchange legitimacy, the analysis reflects that successive governments have attempted to revise the system to address issues such as affordability, fairness and access. News media often highlights that the student loan system is perceived as an evolution of government tactical actions rather than a strategic policy to fund higher education:

It is a morality tale of opportunism and greed on the part of vice-chancellors and one thing leading to another, in a typically unplanned way, on the part of successive governments. (The Independent, 7/7/2017) ⁴⁰

The analysis identified a media perception that the student loan system fails to provide sufficient clarity on where its financial liability resides. This may impact moral procedural legitimacy as fears are raised that clever accounting practices hide the true cost of the system. To improve transparency some commentators in the media have stressed the advantages of positioning the repayment of the student loan as a graduate tax rather than a student loan:

This would be easy to levy, would not be paid by those on low income, and could not be avoided by those whose wealthy parents currently pay their fees. It is a career-based repayment of state benefit. (The Guardian, 31 May 2019) ⁵³

The analysis also highlights that the lack of transparency regarding the true financial cost of a student loan. This is further compounded by the method to calculate interest repayments on the loan that seem uncompetitive and unfairly penalise the student, further impacting pragmatic exchange legitimacy:

The interest rate on student loans derived by adding 3 percentage points to retail price inflation, making it 6.1% from September, looks usurious against the Bank of England rate of 0.25%. As for the interest rate on student loans, there is no justification for its level. (The Sunday Times, 9/7/2017) ³⁰

Finally, the analysis found that the financial accounting arrangements underpinning the total portfolio of all student loans (the student loan book) was in itself a mechanism that may artificially affect the transactional relationship between student and university. Present day governments are perceived by the news media as encouraging universities to recruit students regardless of their suitability to academic life or their ability to repay their loan, because student loan debt is considered to be an interest-bearing asset for government fiscal accounting purposes:

As it stands, student loans are treated as a normal loan for the purpose of the public finances, which means that the cash transfer does not show up as borrowing but as an asset. Interest payments owed, but not necessarily paid, by former students show up as receipts and reduce the deficit. The effect is to improve the deficit in the early years as interest is capitalised. When students fail to meet repayments and loans are written off 30 years later, the loss is incurred as spending. (The Times, 18/7/2018) ¹²⁵

The cognitive legitimacy of the entire university sector, based on comprehensibility (making sense of the world) may be compromised if the public struggles to understand how certain services (the university sector) are financially supported through public funds.

The third component of the price mechanism acting on the transactional relationship between student and university is the accumulated student debt resulting from the student loan. The analysis found that increasing attention is being paid to the impact of the debt burden on students in terms of equity and fairness. For example, Lord Adonis quoted in The Independent:

Accuses “the Government of running a Ponzi scheme which leaves students in England with debts of more £50,000. The student loan system has been distorted by the greed of successive governments and university VCs.” (The Independent, 7/7/2017) ⁴⁰

If student debt is perceived in the media as being unfair to students, pragmatic exchange legitimacy may be affected. If the perception persists that universities benefit unduly from the imposition of student debt, cognitive legitimacy may be at risk. The media reflects the inequity surrounding student debt through a comparative analysis with other student populations:

The Institute for Fiscal Studies believes that British students leave university with “the highest level of student debts in the developed world”. About three quarters of all

students according to the IFS will never pay of all their debt. (The Sunday Times, 9/7/2017) ³⁰

The analysis highlights that such high levels of debt have raised questions regarding the impact of debt on a graduate's future career and life prospects, as well as a graduate's psychological and emotional welling being:

Debt is not just an emotional or financial burden; it is a form of social control. Commercial rates of interest on student loans will mean that graduates have their lives dictated to them by a need to constantly produce. We will work harder and for longer, in the midst of a diminishing welfare state, while having our incomes siphoned off to pay for the profits of large consortiums. (The Guardian, 27/11/2013) ¹²⁶

The level of debt incurred by the student and the time over which the student will be affected by the debt, both financially and emotionally, begins to reflect a more realistic price being paid for their university education (Stradling, 2001). As such, to create effective pragmatic exchange legitimacy the price mechanism should consider tuition fees, loan commitments and the psychological impact of debt.

In sum, the pricing mechanism deployed by the university for its services is an important supply-side attribute of the transactional relationship between student and university. The analysis identified three interrelated components for the university supply-side price-mechanism: tuition fees, student loans, and the debt accrued by the student. Each component is interrelated and dependent and must be considered together, holistically. Each component is underpinned by different social and political assumptions that create complexity for the transactional relationship. Ignoring this complexity will likely affect the pragmatic exchange legitimacy of the university and ultimately it may impact the cognitive legitimacy of the sector.

4.5.3 Transaction Relationships Legitimising Mechanisms (Critical Realist Real Layer)

The following section details a potential causal mechanism for the identified experiences and events related to the transactional relationship between university and student. The causal mechanism was derived from a retroductive analysis of academic literature and newspaper

articles relating to the legitimacy of the entrepreneurial university. The casual mechanism identified is the 'supply-side hegemony of a market-led university sector'.

4.5.3.1 The Supply-Side Hegemony of a Market-led University Sector

A market-led university sector is part facilitated by a dynamic connection between government, industry and university, forming supply-side capabilities aimed at improving the economic outcomes of the university and/or socioeconomic development of the region (Etzkowitz and Leydesdorff, 2000). The market is created when a transactional relationship is formed between supply-side partners (government, industry and university) and the customers of the market providing demand (students).

A retroductive analysis has found that structural forces exist within the transactional relationship between a market-led university sector and the student that constrain the forces of demand (student interests) allowing supply-side forces (government, industry and university) to dominate. In creating effective supply-side characteristics, an entrepreneurial university is not merely a public organisation acting as a private corporation in the pursuit of autonomy and economic imperatives driven by market forces. This is a limited interpretation of the process of entrepreneurial transformation.

Instead the transformation is influenced by a myriad of hegemonic interactions between actors internal (management, academics) and external (government, industry and students) to the university, whereby power imbalances evident in a capitalistic society are continually being opposed and reified across political and ideological boundaries as well as economic (Sotiris, 2012). The relationship between the market-led university sector and the student is a form of on-going negotiation, where power imbalances influence the market equilibrium (e.g. more power, better deal).

For example, government policy driving the massification of higher education has vastly increased the number of degrees being awarded by universities, which in turn has devalued overall, the degree as a means of differentiation for securing the best positions in the graduate job market. Power has further shifted to industry (the employer) as there are more skilled workers for each position and therefore employers are able to decrease employee rights and benefits, yet still secure the skills they need. Therefore, a government policy of expanding higher education to the masses promoted as a means to reduce inequality and being primarily for the

benefit of students, is in fact a mechanism to reduce overall workers rights for the benefit of industry. A further irony being that as a university degree is promoted to students as a means to secure enhanced future earning potential (the graduate premium), the rationale for charging students tuition fees for their education is created. If student numbers are uncapped this will create an unlimited revenue stream for universities that may have a negative operational impact on the university including inflationary leadership remuneration.

As such, it can be argued the primary purpose of the entrepreneurial university is to create new commodities that create opportunities for capital accumulation, benefiting those in power across the market-led university sector (senior university leadership and management, externally focused academic staff, industry and government). In this reading, students and junior researchers are represented as exploited labour resource (Ovetz, 1996).

In sum, as an attempt to counter power imbalances, the analysis showed that students are likely to focus on instrumental economic returns rather than personal enlightenment when making educational choices, increasingly act as a unified student body and invoke legal forms of redress. However, these demand-side experiences are likely to create a supply-side response that maintains supply-side hegemony as the supply-side retains the capability not only to define the configuration of the product, but also the rules of game (e.g. price mechanism) through the consortium of supply-side self-interest comprising university, government and industry.

4.6 The Tier Effect of University Sector Competition

A primary reason supporting the proliferation of market-led ideology across the university sector is the idea espoused by economists that “marketplace competition forces providers of a service to be more efficient” (Levin and Belfield, 2003: 196). Accordingly, increased competition across the university sector should lead to the provision of higher quality services, with a positive resulting outcome for university legitimacy.

A grounded theory analysis of news media considering the entrepreneurial university identified a theoretical concept, *‘the tier effect of university sector competition’*, linking competitive market led behaviour to university legitimacy.

The following section documents the findings of this analysis aligned against a critical realist framework describing the experience of university competition, the observable events of competition and finally, the causal mechanisms of competition that may influence the legitimacy of the university.

4.6.1 *The Experience of University Sector Competition (Critical Realist Empirical Layer)*

Grounded theory analysis of competition across the university sector yielded two critical realist experiences. These are: that competition for students may work against student’s interests; and secondly, competition between universities may reify an already tiered university sector. The next section considers each in turn.

4.6.1.1 Competition for students may work against student’s interests

Although competition between universities should enhance the quality of university provision and therefore benefit the student, the analysis found that the university’s approach to competition might in fact disadvantage the student. The analysis identified three areas of concern.

Firstly, news media reflects that tools and information enabling market competition and used by the student to decide which university to attend, may be biased or exert undue influence leading to incorrect choices. Additionally such tools may induce universities to adopt behaviours in response to competitive demands that may not be positive. For example, the analysis highlights that league tables detailing university performance and degree results, an important influence in student university choice, may encourage a university to lower exam standards in order to increase the number of high grade degrees awarded thereby creating an impression of successful achievement. This 'grade inflation' may risk the university's moral consequential legitimacy by reducing the quality of university education, as course content is 'dumbed-down' to maintain or even increase qualification attainment:

In 2009, Baroness Blackstone, the then Vice Chancellor of Greenwich admitted there had been some grade inflation in the numbers of first and 2:1 degrees due to league tables and the sooner universities moved away from this crude assessment the better. (The Guardian, 2/4/2009) ⁶⁰

The analysis found that competition may also tempt universities to make prospective students reduced requirement offers, or even unconditional offers to entice them to accept a place at the university. This may impact moral procedural legitimacy as rules and processes are overlooked in order to make the university more attractive to potential students. The news media often present universities as being under pressure to recruit new students:

For two out of five teenagers, next week's A-level results will be irrelevant — because they have already been given a free pass to university in the shape of an unconditional offer. A record 38% of students were made such offers, which guarantee a place on a degree course regardless of A-level grades. The move comes as universities scramble to fill places in the face of a dip in the number of 18-year-olds, especially boys, applying for higher education. (The Times, 4/8/2019) ¹²⁷

The analysis highlighted that whilst reduced A-Level grades may not impact progression to university, poor A-Level grades may impair the student's future career prospects. As argued by Hanson "whilst getting lower A-Level grades won't stop you from attending university, they are one of the first measures that graduate recruiters use to sift out an application." (Hanson, 2017: 7) This will affect pragmatic exchange legitimacy as students not only undervalue their A-level

results having secured an easy passage to university but possibly also undervalue the effort required to attend university. In effect, undervaluing the very university education they seek.

Secondly, the analysis highlights that the overwhelming attention given to universities may marginalise other forms of further education such as technical training, effectively reducing student choice. Today, going to university is often positioned in the media as a societal norm rather than an option only available to the academically inclined. This may divert resources away from non-university education. For example, the news media readily reflects the decline of technical training for young adults:

The crushing of Britain's skills-orientated college sector over the past decade – down 16% - has been a scandal. (The Guardian, 31 May 2019) ⁵³

The analysis identifies that declining interest in technical skills training is having a detrimental impact on the economy. Although not a responsibility of the university, this may affect the cognitive legitimacy of the university sector if the public perceive young people lack the necessary skills to contribute to society. This is a responsibility that often underpins university cognitive legitimacy. This skills gap is often highlighted in the media:

Robert Halfon, chairman of the committee, said: "The reality today is that there is not enough high-quality apprenticeship training, which is letting down apprentices and employers. Apprenticeships can offer an extraordinary ladder of opportunity for young people to get the skills, training and jobs they need to ensure security and prosperity for their future." Neither employers nor apprentices "can have genuine confidence that quality training is being provided" by many new organisations, he said. (The Times, 8/10/2018) ¹²⁸

The analysis also identifies that opportunities for young people may be constrained if students are encouraged to sign up for poorly rated degree courses at less reputable universities rather than embarking on alternative paths such as vocational training. This may happen when the market for university services over-estimates the moral consequential legitimacy of the university in comparison to other options such as vocational training:

Britain should be giving children an opportunity to thrive outside the conventional academic route if that is what they choose. With lagging productivity and a skills gap,

Britain's economy needs them. Over the past decade there have been important developments in improving technical education. (The Times, 22/4/2019) ¹²⁹

Over-estimating moral consequential legitimacy is likely to occur when information asymmetry is present (i.e. students lack the necessary facts to make informed choices). Universities are sometimes perceived in the media as attempting to recruit students on to university courses using unsubstantiated graduate career prospects and salary claims. The weight of university representation in the media over other forms of further education may quieten the case for non-university training although vocational students often "end up as happy in the their careers as those who do a degree, with similar earning potential" (The Daily Telegraph, 14/8/2015) ⁴³

The analysis highlights that competition between universities may lead to the recruitment of students not suited to higher education. The news media present the increase in student dropouts as an example of this. Moral consequential legitimacy may be impacted as poor university outcomes are emphasised and as the public begin to recognise the significant levels of wasted resource associated with the university. Pragmatic exchange legitimacy may also be impacted as students that drop out lose twice: the missed opportunity of the path they should have chosen and the personal reputational damage of being seen as a failure in the eyes of future employers:

Higher education in the UK was the only level at which starting a course and failing to finish it was actually worse for one's prospects than never starting at all. (The Times Higher Education Supplement, 8/3/2018) ⁸⁹

Finally, to maintain university reputation, competition between universities may lead to selection processes that favour the privileged. Recruiting the right students (that are most likely to contribute and enhance a university's academic and research quality) will help maintain the university's reputation and moral consequential legitimacy. Such reputation and legitimacy is in itself critical in attracting the best students, thereby creating a virtuous circle. The media highlights that as the numbers of those with suitable academic qualifications far outstrip the places available universities may look to other factors such as extra qualifications, life experience, interpersonal and presentation skills, or even social network, when making admission decisions. This may advantage students who have benefited from elite secondary and private education, thus limiting social mobility:

Students whom Oxbridge accepts are much more likely to have been privately educated than those attending lower-ranked institutions. (The Times Higher Education Supplement, 27/10/2016) ⁷²

In sum, to maintain their legitimacy, qualifications from elite universities must be seen to reflect consistent levels of academic ability and the hard work of all students who attain them. The competitive need to attract increasing numbers of students may encourage the university to adopt competitive practices that ultimately work against the student (e.g. lower attainment standards, unconditional offers, biased recruitment). If university access and ultimately, universities degrees, are awarded for reasons other than merit, the university's moral structural legitimacy may be put at risk. However, if merit is the only criteria used for admission to university, structural privilege may obstruct social mobility. In this way, meritocracy may be seen to legitimise inequality within the higher education system.

4.6.1.2 Competition between universities may reify an already tiered university sector

The rationale to open up the university sector allowing new suppliers to enter, as well as allowing existing providers of higher education services to be called a university, was to encourage competition to support wider participation and improve standards. However, as older universities could leverage historical structural advantages a tiered market was created that "stretched the vertical hierarchy and widened the gaps between segments" (Lauder et al., 2006: 900). The news media reflects this has left some of the newer universities at the bottom, struggling to fill course places and facing severe funding deficits:

The removal of the cap on the number of students, universities can accept and the trebling of tuition fees has led to frenzied competition within the sector to attract students. It has seen many institutions to lower their entry requirements, which has had a knock-on effect on many lower-tariff universities. Matt Robb, an education specialist for management consultancy EY-Parthenon, said conditions had become much more difficult for universities: "I would say there are about three or four universities where it is possible [they could go bankrupt]," Mr Robb told i. (i News, 1/11/2018) ¹³⁰

The analysis found that academics at newer universities (Post-92) spend more time on their teaching and administrative duties than academics at older, traditional research-led universities. This allows traditional universities to develop all aspects of their moral legitimacy including

ensuring quality outcomes for their students, engaging in noteworthy research, developing enriching external relationships and building the reputations of their academic staff. On the other hand, the news media presents the post-92 universities as constrained in their capacity to develop strategies targeting the external stakeholders and opportunities needed to enhance their moral legitimacy. The gap between the traditional and post-92 university is therefore perceived to be widening:

New universities are entirely focused on commercial aspects of bringing in fee-paying students and franchising programmes, to the neglect of the softer side of internationalisation involving aspects such as “cross-cultural cooperation” said Alison Pearce, Northumbria University. (The Times Higher Education Supplement, 21/1/2016) ³

The established elite universities in the UK (The Russell Group) are portrayed in the news media as protecting their established reputation, historical legacy and current market position embodied in their moral and cognitive legitimacy. They are perceived as not needing to adopt inherently risk-loaded strategies in an attempt to grow new market share through the introduction of new, often unproven services. However, the media reflects that newer institutions often need to take a more entrepreneurial, riskier approach to compete. These strategies often focus on pragmatic exchange legitimacy:

Sometimes younger institutions can be keener to have entrepreneurial leaders with global expertise than older universities where the key goal is to maintain an institution that is already world class. (The Times, 2/1/2018) ²³

Additionally, the analysis reflects that the reputation of a university is often based on its research capability. The news media highlight that some newer institutions may have limited research or PhD facilities putting them at a severe disadvantage. (The Guardian, 5/11/2012)¹³¹ Through their enhanced cognitive legitimacy, elite research universities are able to secure more funding and attract more students. Because the cognitive legitimacy of the elite university is typically linked to the quality and proficiency of its past research output this creates a virtuous circle. News media reflect that past reputation is likely to secure future endowments and thus provide a competitive advantage for traditional, research-based universities:

The House of Commons Science and Technology Committee’s report, Balance and Effectiveness of Research and Innovation Spending, published on 12 September,

expresses concern about an analysis that showed that around 41 per cent of government-supported research was concentrated in London, Oxford and Cambridge. They say that allocation of research funding according to assessed research excellence accentuates the so-called “Matthew effect”, under which, as any research “cluster” grows, it becomes more likely to be successful in securing future funding, leading to further concentration. (The Times Higher Education Supplement, 12/9/2019) ¹⁸⁴

At the upper echelons of the university sector elite institutions are able to withstand the need for commercial management and maintain academic leadership of the university, building moral structural legitimacy, which in turn helps to attract the very best academic talent. Oxbridge retains a collegial driven governance model because it is not reliant on commercial revenues for its continued operation. The news media highlight that because of their vast assets and historical wealth, their historical reputation and elite status and leading research facilities, Oxbridge have a natural competitive advantage when collaborating with industry and other stakeholders on external commercial ventures.

It is ironic that the two most famous universities in the world, Oxford and Cambridge, are the only UK institutions that reject the corporate model and are governed, at least nominally, by the academic community. (The Times Higher Education Supplement, 23/4/2009) ⁷⁸

In sum, the competitive demands of a market-led university sector will present the elite and traditional university with significant advantages that reify an already tiered market. Advantages include: the ability to attract new students; securing research funding; building external relationships; and finally, maintaining academic-led governance and autonomy. It is unlikely that the original intention of allowing any institution the right to call themselves ‘a university’ in order to “break the upper-middle class elitism of Oxbridge and the middle-class elitism of the red bricks” (Clive Boom quoted in The Times Education Supplement, 29/7/2010) will be achieved. In fact, the influx of new universities competing at the lower end of the market may dilute the reputation of the university sector as a whole. This may reduce the sector’s cognitive legitimacy, forcing individual universities to build legitimacy through pragmatic means that will favour the already successful.

4.6.2 *The Events of University Sector Competition (Critical Realist Actual Layer)*

Grounded theory analysis of competition across the university sector yielded two critical realist events. These are: rising senior university management remuneration; and secondly, universities thinking and acting globally. The next section considers each in turn.

4.6.2.1 Rising senior university management remuneration

The role of the vice chancellor (VC) and the senior leadership team within the university changes as governance requirements evolve. In the period immediately following the Second World War councils of senior academics predominantly led universities with limited VC influence. The 1980's saw more direct government intervention in the form of funding councils, compelling VC's to take more accountability for funding management. With the advent of government policy for university expansion, driven by market-led principles, the responsibilities of the VC increased further (Walker et al., 2018).

The critical realist event, 'rising senior university management remuneration', that emerged during the analysis can be described through three components: context, leadership capabilities, and controls.

The first component of 'rising senior university management remuneration' relates to context. News media reports suggests that the event of rising VC remuneration is grounded in the market-led context of university expansion where universities had little choice but to adopt commercial strategies, as growth became an unchallenged objective across the sector:

The corporate university is relentlessly and globally competitive. Its brand depends on academic attainment and promise of the students seeking to enrol. (The Sunday Times, 25/11/2012) ⁵⁷

When viewed as entrepreneurial driven organisations, the media reflects there is tendency for universities to adopt models of governance found in large commercial enterprises, in the belief they are mirroring recognised best practice including viewing Vice Chancellors as Chief Executives. (The Times Higher Education Supplement, 24/4/2009)⁷⁸ This emphasises the importance of moral personal legitimacy as exceptional leaders are perceived as essential in

driving the strategic entrepreneurial intent of the university. However, the entrepreneurial university is still a university at heart, with its core revenues derived from teaching and research, typically secured with minimal competitive intervention.

The analysis suggests that comparing the university to a FTSE organisation may not be appropriate. To build moral structural legitimacy FTSE companies need to reflect the interests of their shareholders. Poor performance and bad management decisions become transparent through falling share prices. The news media highlights that universities have no shareholders and this visibility is not available. Hence, applying such governance models to a university may adversely affect the university's moral structural legitimacy as it provides VC's with all the power and reward, but with limited transparency and therefore liability for poor performance.

The analysis found that the justification for paying UK university leaders salaries comparable to those found in large global businesses, because they are competing in a complex, international market place and require the best international leaders to prosper, is not supported by recruitment patterns:

The global market for talent is the argument most commonly used to justify VC's large pay packets... However, four in five top universities recruited the VC from another British university, casting doubt on claims they have to pay top dollar because they are in a global market. (The Times, 2/1/2018) ²³

The news media perceive VC's to be ordinary academics, whose career progression follows the typical path based on academic achievement and luck:

For the most part they are not top international university managers: "Just middle ranking academics who went into administration and got lucky. They should be treated as such – halve their pay and eliminate their vast perks" stated Lord Adonis. (The Times, 2/1/2018) ²³

The context of rising senior university management remuneration sees pay justified by the perceived need for universities to compete as large-scale corporate entities with global reach. The analysis shows this is unlikely to be provable. A more realistic perception is that the requirement for a high profile and highly paid Vice Chancellor is simply an attempt to build

pragmatic exchange legitimacy by adding to the perceived reputation and prestige of the university:

The more a university wants to appear legitimate, the more it needs to play the game, the more readers and professors it needs for its public profile and the higher its salary bill. (The Times Higher Education Supplement, 29/7/2010) ⁸⁰

The second component of the event: 'rising senior university management remuneration', discusses the capabilities of leadership and whether the university needs academics (lowly paid) or business specialists (highly paid) at the helm.

As universities adopt a more commercially orientated stance a common area of conflict raised in the analysis relates to the background and experience of university leaders. Namely should they come from an academic or industry background? In an attempt to build moral personal legitimacy, news media perspectives supporting business leadership tend to emphasise the commonality between business and academia:

Many of the challenges facing universities are the same as those facing the commercial world, greater competition for talent and customers intensified by operating in a global marketplace with fast moving technology, so it makes sense that leadership forged in business should translate into a university context. (The Times Higher Education Supplement, 16/1/2014) ⁷

The business leadership perspective was often countered in the analysis by the argument universities face limited competition. Universities claim to be entrepreneurial but in reality their quasi-monopolistic position supported by government regulation ensures a sustained flow of paying customers in the form of students, who have no or little redress for quality of service they receive. This position emphasises pragmatic exchange legitimacy as university leadership is mainly concerned with maintaining that the majority of commercial risk lies not with the university but is shifted to the student and/or the taxpayer:

The largest group of fake capitalists are crony capitalists – those industries and tycoons relying on government connections and contracts. Most are quasi or absolute monopolies, all of them rent-seeking activities by their very nature". (The Sunday Times, 20/5/2018) ²⁸

A more positive argument identified in the analysis to support academic leadership of the university emphasises the university's unique environment based on knowledge, scholarship and collegiality. To build moral structural legitimacy, leadership needs to create a culture conducive to academic excellence:

To be a good leader you have to understand the psychology behind your core workers, you have to know what motivates them, whereas business leaders moving to universities tended to introduce 'managerial systems' to try and 'control' academics whose work they did not understand. Dr Goodall, Cass Business School quoted in (The Times Higher Education Supplement, 16/1/14) ⁷

The analysis seems to demonstrate a balanced, and therefore contested position, of what is best for the university in terms of leadership. However, regardless of whether a business or academic leader is in control of the university, the manner in which they themselves are controlled has come under scrutiny in the media.

The third component of the event 'rising senior university management remuneration' discusses the mechanisms deployed to control VC pay. The news media perceive that control of VC pay is not achieved by performance related mechanisms. Though capable of enhancing moral procedural legitimacy, performance related pay does not appear to be prevalent in the higher education sector. The media often reflects the perception that higher Vice Chancellor pay does not correlate to improved university performance:

The most comprehensive study into university vice-chancellors' pay has demolished their claims that their huge rises are based on performance. Economists have shown that instead it is the vice-chancellor equivalent of "keeping up with the Jones's" as the lower-paid race to close the gap with the best-paid university bosses. "A better performance of the VCs is not what causes a higher pay," say the researchers who analysed the performance of 154 universities' vice-chancellors over a decade on everything from the quality of their university's research to increasing student participation. (The Daily Telegraph, 6/6/2018) ⁸⁵

Control over pay is more likely to come from an adversity to bad publicity. The issue of increasing VC pay has received considerable attention in the news media, with the majority of coverage

negatively positioned. The analysis identifies that the negative reporting of VC remuneration may in itself act as a natural control to constrain increases in remuneration, with the consequence that VC pay only reaches private sector levels when a university is unaware of the impact on its moral consequential legitimacy:

Remuneration committees only partially adjusted pay increases toward private sector benchmarks, however, because of concerns academics would not view the full adjustment as legitimate. Legitimation rather than financial constraints are likely to be the cause. (The Times Higher Education Supplement, 28/8/2008) ⁸⁵

These findings collaborate research which shows that increases in VC pay are more likely to result from benchmarking exercises than be related to university performance (Gschwandtner and McManus, 2018).

In sum, in considering context, leadership capabilities and controls, the event 'rising senior university management remuneration' demonstrates that a university's legitimacy may be impacted by certain entrepreneurial behaviours. Rising senior university leadership remuneration cannot be justified by the increased corporate responsibilities of the university for these are limited. Nor can it be justified by the need for business specialists to lead, as academics seem equally suited to the position. Nor can performance management control justify rising pay, as these mechanisms are rarely invoked. Without the necessary context, capabilities or control, rising VC remuneration lacks justification that will adversely impact both the pragmatic exchange legitimacy of the university and its moral structural legitimacy.

4.6.2.2 Universities are thinking and acting globally

The advent of a market-led university sector and the emergence of the entrepreneurial university has seen the reputation of universities "linked directly to the intensity of their global involvement" (Scott, 2011: 73). This is particularly prevalent for research centric universities that typically compete on a national and international scale for students and staff, whilst teaching centric universities focus on local markets (Aghion et al., 2010). The global phenomenon of the university is readily recognised. For example, Drew Faust, the president of Harvard in 2012 enthusing about global growth: The principle good news of her lecture was that the number of universities worldwide was growing, as was access to them. (The Sunday Times, 25/11/12) ⁵⁷

The global phenomenon of the university, demonstrated by the event ‘universities are thinking and acting globally’ was observed to function on both marketing and operational levels.

As a marketing event, the analysis identified that there has been a proliferation of publicity and branding material produced that emphasise the global perspective of today’s universities. Marketing activity if effective should contribute to the university’s pragmatic exchange legitimacy. The media reflects that marketing material forms a coherent discourse that is positioning the UK university sector as a global player seeking overseas involvement:

There are many examples of use of the word “global” in university literature, branding and marketing information (e.g. ‘Forming Global Minds’ – University College Dublin; ‘London’s Global University’ - University College London) that directly appeals to the overseas market for UK higher education. (The Sunday Times, 25/11/12) ⁵⁷

Supporting increased global branding, the analysis shows that UK universities are being recognised as global operators with their performance measured against international universities, not just domestic ones. With the potential to enhance pragmatic exchange legitimacy the news media readily recognise the world-class research capabilities of UK universities:

We already have a world-class research infrastructure. In the global league tables, the UK’s universities rank second only to those of the United States. While just 0.9% of the global population lives in this country, we have 4.1% of the world’s researchers; articles published here account for 15.9% of the world’s most highly regarded academic output. (The Sunday Telegraph, 13/11/2016) ⁴⁷

The media reflects that other stakeholders including government and industry often reinforce the message of global success. For example, business recognising that the UK has a highly regarded university sector:

In the UK, we have many components for getting technology right. We are powerfully over-represented in the world’s top 50 universities. Nigel Wilson, CEO Legal & General. (The Sunday Telegraph, 1/7/2018) ⁴⁵

From this, it seems the university sector is perceived in the media as a global success. However, the analysis identified a risk that the overuse of global marketing may be costly, both in terms of financial resource and in diverting focus from academic excellence to management and administration. This may impact the moral consequential legitimacy of the university if outcomes are perceived as talk rather than action:

Universities are spending millions of pounds on marketing in a battle to recruit students as competition intensifies in the higher education sector, a Guardian investigation can reveal. Data obtained from freedom of information requests shows universities spending hundreds of thousands of pounds on digital advertising and social media in a direct appeal to 18-year-olds, as well as adverts on billboards, buses and the London underground. (The Guardian, 2/4/2019) ¹³³

The purpose of marketing is to attract customers. The global brand positioning of the university sector has targeted both domestic and overseas students, but overseas revenue is more highly prized (see section 4.4). In addition to securing revenue from overseas students studying in the UK, the UK university sector was perceived in the media to be actively looking to expand operationally into international territories to secure additional revenue streams.

As an operational event the analysis identified multiple models of overseas university expansion including establishing branch campuses, courses and/or faculty partnerships, validation services, and franchising, each with different benefit and risk profiles (Wilkins and Huisman, 2012). However, the analysis found that currently the risks seem to outweigh the benefits. Such overseas expansion will require strong pragmatic exchange legitimacy based on a clear understanding of stakeholder need (which may be absent). Over prioritising the needs of overseas stakeholders may compromise domestic stakeholders and therefore impact the university's domestic reputation, based primarily on moral and cognitive legitimacy. The analysis identified several concerns.

The first area of concern identified by the analysis relates to the effectiveness of overseas campuses and whether there is sufficient demand for their services. Universities expanding overseas have provided "a combination of distance education and partner-supported delivery, with small numbers enrolled in branch campuses" (Ziguras, 2011: 127). The limited uptake raises concerns about viability in the media:

Aberystwyth University open its first branch campus in Mauritius. Derec Llwyd Morgan describe the project as “madness” after it emerged that the initial enrolment in its first two years consisted of a mere 40 students. (The Times Higher Education Supplement, 6/10/2016) ²

Scandals are often reported in the media emphasising the lack of quality control, oversight and accreditation, with direct implications for all aspects of moral legitimacy. As the university is trading on its name, overseas reputational damage may impact its domestic reputation. News media perceive the ability of a university to assure quality of service from distance, including getting the right academic staff to teach on international campuses, as very challenging:

There is a third pitfall: governing bodies are a risk-averse lot, and an overseas venture that offered sub-par teaching could do a university's reputation more harm than good. And other risks are more tangible. In 2007, Australia's University of New South Wales opened a Singapore campus. It was meant to serve 15,000 students; actually, it attracted fewer than 150. It closed in a matter of weeks, leaving the university with a bill of over S\$22m (£11m). (The Guardian, 6/8/2012) ¹³⁴

Another concern highlighted by the news media is the need to operate under different laws and regulations, requiring informal and formal relationships with international governments. The analysis identifies the potential risk of overseas government coercion, especially with states with different political ideologies or indifferent attitudes toward human rights or civil liberties. The different and often contradictory regulatory and policy controls across states was emphasised in the analysis. (The Times Higher Education Supplement, 4/1/2018) ⁸¹

News media highlights that in addition to limited control in the delivery of overseas educational services, the university is at risk if its focus is diverted from its core responsibilities in its domestic market. This may not only undermine all aspects of a university's moral legitimacy, but through association, the cognitive legitimacy of the UK university sector as universities often export under collective campaigns facilitated by the UK Government Department for International Trade or the British Council:

If the UK's universities continue to expand their teaching abroad, does this not pose fundamental questions about who they serve and how they hang on to their legitimacy in this country? (The Times Higher Education Supplement, 18/10/2012) ⁷⁷

News media reflects that whilst the risk of reputational damage is high, the financial rewards on offer may be limited. Many UK universities are reconsidering their international expansion plans. (The Guardian, 31/10/2018)¹⁹⁷ Those universities that persist may be attempting to leverage (and expand) domestic cognitive legitimacy by extending supply chains, developing an international reputation, forming relationships and establishing a path where overseas students can study in the UK:

An alternative source of funding — opening up campuses overseas — also appears to be drying up. University College London has just announced that its involvement with a Qatar campus will end in October 2020. It closed its Australia campus in 2017 and ceased teaching in Kazakhstan in 2015, the Times Higher Education magazine reports. (The Times, 3/1/2019)¹³⁵

Finally, the analysis found that government departments often interpret the lack of financial return as ineffectiveness on the part of the UK university sector. The media reflects that universities often face government pressure to leverage export opportunities and support economic growth:

Mr Alexander is said to have suggested that UK Universities are not entrepreneurial enough overseas, pressing a University of Nottingham representative about the returns from its Asia campuses. (The Times Higher Education Supplement, 27/2/2014)⁹

As such, university overseas expansion may be seen as something resulting more from government coercion than competitive pressures across the university sector.

In sum, the event ‘universities are thinking and acting globally’ comprises elements of marketing and operational activity. Supported by marketing strategies based on global rhetoric and leveraging past reputations, universities have configured their operations toward the pursuit of overseas growth to maximise revenue. However, this may lead to a loss of focus on domestic delivery and a consequential drop in quality in domestic provision, leading to reputational loss. As international competition grows the loss of domestic focus may lead to poor performance on international league tables, endangering the very pragmatic exchange legitimacy the sector’s overseas expansion was based upon.

Some UK universities will and have been successful in their international expansion. However, how much of this success is due to legacy advantages versus entrepreneurial effectiveness is questionable. Other universities should ensure their context and capabilities are appropriate before copying what appears to be successful strategy.

4.6.3 University Sector Competition Legitimising Mechanisms (Critical Realism Real Layer)

The following section details potential causal mechanisms derived from a retroductive analysis that might explain the identified experiences and events related to university sector competition. Two casual mechanisms have been identified: the reliability of ranking systems, and, the hegemony of elite universities.

4.6.3.1 Reliability of Ranking Systems

Competition across the market-led university sector was formalised through university ranking systems and league tables. Competition intensified and broadened beyond the nation state with the advent of global university rankings (Naidoo, 2016). As such, ranking systems represent a significant causal mechanism to effective competition across a market-led university sector. However, ranking systems face several challenges that impact their reliability.

Firstly, ranking systems may stifle competition, as elite universities are able to build monopolistic positions based on historical performance (Marginson, 2013). Criteria utilised in ranking systems prioritises past performance and therefore new entrants to the market will likely suffer in comparison to established universities. Established universities will thereby achieve higher-ranking positions and as a result will be able to attract additional resources, thus maintaining their leading position. A self-serving relationship is formed (Erkkilä and Piironen, 2014)

Secondly, global ranking systems and comparative tools are founded on westernised ideology (particularly influenced by US and UK) perpetuating the domination evident in the colonial regimes of the past. This will include the use of western cultural templates, westernised curricula and language. These templates will be directly transposed and made to fit local context. Thus the basis of measuring success is based on a standardised model, reflecting westernised neoliberal values (Shahjahan, 2013).

Finally, current ranking systems fail to reflect the often difficult to quantify entrepreneurial contribution of universities to socioeconomic development. This is exacerbated by the methodology (i.e. case study centric) employed to study entrepreneurial university behaviour and the methodological limitations of ranking systems that are susceptible to stakeholder bias and open to respondent manipulation (Lynch, 2014). Etzkowitz (2016) argues a suitable metric for the entrepreneurial university must take account of internal and external considerations. Internally, it must account for the tension between the need for more university autonomy; the increasing involvement of external stakeholders; and, achieving balance between the multiple missions of university (teaching, research and socioeconomic development). Externally, it must account for the manner in which technology and knowledge based economies reduce the need for human capital when investing in initiatives seeking financial return and the focus of technology that democratises society versus that providing social control.

In sum, ranking systems are essential structural mechanisms enabling competition across a market-led university sector. However, the inherent bias encapsulated within ranking systems (past performance/western ideology) and their limited assessment of entrepreneurial outcomes, may reinforce inequalities and sustain the position of the already powerful (Robertson, 2012)

4.6.3.2 Hegemony of Elite Universities

The hegemony of elite universities is a structural condition and causal mechanism resulting from the historical power struggle between university actors. The hegemony of elite universities significantly shapes the competitive nature of the market-led university sector and is characterised by several features.

Firstly, the ability to secure the best talent is an attribute of the elite university. As research output is a critical determinant of university performance and the best researchers are attracted to the best universities, the relationship between university status and research is co-constituted (Aspers, 2009). Similar arguments apply to the recruitment of undergraduate students where admissions processes are structured to allow only the very best students entry, often citing meritocracy as justification. This ensures not only that the elite university maintains hegemony through excellence in academic achievement but also creates an inequality among students where privilege is reified (Jeffries, 2018). Increasingly, elite universities are looking to recruit the very best international student and research talent. Driven by university status this risks

depriving emerging nations of its own academic talent, thus maintaining global social injustice (Li and Lowe, 2016).

Next, human related factors and people capabilities differentiate universities that establish competitive advantage in a market-led university sector (Philpott et al., 2011). Unfortunately, it is not possible to simply replicate these factors due to the inherent unpredictability of human performance. Effective people capabilities cannot readily be “deliberately developed, rather they ... organically manifest” (Gramescu and Bibu, 2015: 102). Therefore, building such capability may not be in the gift of new universities, providing hegemony for already successful universities. Developing people capabilities may require a process of chaotic innovation, of trial and error, and will need new cross faculty organisational structures, different incentives and a change in academic ethos.

Finally, universities outside the elite often rely on academics or administration staff to execute specialist business tasks (e.g. negotiation). Utilising inexperienced or non-qualified resource for such tasks will reduce the commercial effectiveness of the university (e.g. poorly defined commercial arrangements with external parties). Dill and Van Vught (2010a) argue that the majority of universities do not themselves attempt to bring their research innovation to market, rather they look to patent IPR and sell these rights onto third parties. As the experience and ability to conduct such negotiations is rarely a competence of an academic, universities tend to be ineffective at this and often lose money. Those that succeed are typically those with a proven track record and tradition of commercialising research (i.e. elite universities). Therefore, government policy allowing universities to exploit IPR only reinforces the legacy advantages of elite universities and may provide a barrier to new universities as they miss out on funding and are unable to attract research centric academics and/or students.

In sum, elite universities are able to maintain hegemony over other universities through the recruitment of the very best talent, the difficulty in developing human talent in non-elite universities and the limited availability of specialist business skills in non-elite universities. This creates a co-constituted relationship between competitive resource recruitment and institutional success. As such, the hegemony of elite universities is a significant cause of competitive advantage in a market-led university sector.

4.7 The Impotence of University Regional Contribution

Increasingly, governments are applying pressure to generate socioeconomic returns from publically funded university research through “public support mechanisms and incentive structures” (Meyer, 2003: 107). Consequently, the need for universities to demonstrate their contribution to regional development is becoming important to university legitimacy.

The following section considers the *‘impotence of the university’s contribution to regional development’*. This theoretical concept emerged through a grounded theory analysis of news media where a relationship between the university’s contribution to regional development and its legitimacy was found. The following section documents the findings of this analysis aligned against a critical realist framework. This describes how the university regional contribution is experienced, the observable events of regional contribution, and finally, the causal mechanisms of regional contribution that may influence the legitimacy of the university.

4.7.1 *The Experience of University Regional Contribution (Critical Realist Empirical Layer)*

The analysis of the regional contribution across the university sector yielded three critical realist experiences. These are: the configuration of the regional environment determines socioeconomic success; secondly, university collaboration with industry may not be a natural relationship; and thirdly, university regional contribution may be rhetoric rather than action. The next section considers each in turn.

4.7.1.1 The Configuration of the Regional Environment Determines Socioeconomic Success

Universities are increasingly recognised as important enablers of economic and social development as local regional economies become centred on knowledge as key factor of production. However, regions will be structured by specific capabilities and controlled by different national and local political policies, creating a diverse range of industrial and innovation strategies within each region.

The analysis identified national government policy as an important factor determining the configuration of the region. Unlike in the US, where the government encourage technology licensing between universities and industry, the UK has not proscribed or encouraged through policy or financial incentive an approach by which the university should contribute to regional development. The news media perceive this has freed individual universities to tailor their interactions with industry based on the university's unique characteristics and preferences. This has created a diverse range of approaches.

Grants have not been prescriptive regarding how universities should interact with business, with funding distributed on the strength of a university's self-generated plans for doing so. (The Times Higher Education Supplement, 28/2/2019) ⁵

From a public perspective this may be confusing, as what constitutes a successful collaboration may be difficult to define, limiting the university's ability to build pragmatic exchange legitimacy.

By emphasising autonomy the onus falls on the university to drive entrepreneurial strategies that contribute to regional development. The media reflects that this fails to account for the fact that most variables related to regional development are likely to fall outside the control of the university. Therefore, policies that emphasise the autonomy of a university to commercialise their research are likely to fail:

Innovation policies focused exclusively on higher education are bound to fail. Governments should be wary of delegating the task of creating knowledge economies entirely to universities. (The Times Higher Education Supplement, 28/2/2019) ⁵

The mix of private industry and public services located in the region will impact the region's enterprise dynamic. To build moral structural legitimacy the ability of the university to align its own capabilities and focus (local, national or global reach) to that of its region is subject to complex and often bureaucratic relationships. The media present universities as being constrained in the level of entrepreneurialism they can achieve due to the complexity of collaboration within its region:

The MPs said a lack of collaboration between universities and the private sector had been an issue for years, with no fewer than 12 reviews on the matter in the last 15

years, but that the issue continued to hold back British research despite the rise of technology transfer divisions at top universities. (The Daily Telegraph, 13/3/2017) ¹⁵³

Failing to understand the unique mix of public and private enterprise in a region is a major issue. The media perceive that most areas in the UK would like to be the next Silicon Valley. The reality is that the history of Silicon Valley is dominated by technology: “Silicon Valley is a technology monoculture”. (The Guardian, 17/2/2015)¹² In the UK regions usually comprise many different industries with different characteristics and capabilities.

The analysis identified that a university’s regional development initiatives need to consider the wider characteristics of regional stakeholders. This emphasises the importance of pragmatic exchange legitimacy, as areas of mutual interest and benefit need to be identified. Then again, the decision of entrepreneurial firms to set up within a given locality is not only influenced by the local infrastructure (the quantity of innovative firms, the quality of labour and knowledge infrastructure) but also by the presence of specific types of research-intensive university (Audretsch et al., 2012). Entrepreneurial firms seem able to recognise the quality of university outcomes, implying the moral consequential legitimacy of the university is strong. The news media reflects the link between specific university strengths (outcomes) and regional performance:

Strathclyde would argue that it has been a successful pioneer in spinning off hi-tech companies. Heriot-Watt and Edinburgh universities have combined to create innovations aimed at transforming Edinburgh into the data capital of Europe. Dundee’s two universities are behind the rapidly expanding life sciences industry. (The Times, 1/6/2019) ¹⁵⁴

Therefore, it should be recognised that the entrepreneurial inclination of a region may be co-constituted with the research profile of any university located within the region. Guerini et al. (2014) show that the presence of either a research university or established industry research capability in a geographic area will lead to greater entrepreneurial activity and the creation of new knowledge intensive firms. Whilst Lendel (2010) found that the presence of a research university positively affected the economic performance of its local region above cyclical fluctuations and that the more prestigious and research intensive the university is, the greater its economic impact. The analysis supported this, for example the case of Bournemouth:

Bournemouth has relied heavily on the local university to provide skilled workers in the gaming and marketing industries in order to achieve its record digital growth. (The Daily Telegraph, 5/2/2015) ¹⁵⁵

However, the analysis found that there is a danger that research-intensive universities will target global markets, ignoring the needs of its local region. While teaching focused universities may not have the research capabilities required by the local region (Shattock, 2005). Therefore, the region may fail to leverage the capabilities and potential of its local universities.

In sum, the analysis shows that the configuration of the local region is critical to its socioeconomic success. A university's capabilities should be intrinsically aligned with those of local industry and local political imperatives. Therefore, in addition to nurturing pragmatic exchange legitimacy, the university will need to protect its moral consequential legitimacy in order to attract partners capable of supporting its regional development efforts. Failure to understand the unique characteristics of the region will likely render impotent the university's contribution to regional development.

4.7.1.2 University Collaboration with Industry is not a Natural Relationship

The analysis identifies that industry and commercial enterprises operate under different pressures to those of a university and therefore may have different priorities and constraints.

Firstly, the news media reflects that a university may have a different ethical position to that of industry. If a university collaborates with a commercial enterprise it will have to accept that operational decisions by the commercial enterprise may increase the reputational risk for the university and/or an individual academic. For example, the media highlights the relationship between the University of Cambridge and Cambridge Analytica:

Alexsandr Kogan, the academic at the heart of the scandal has seen his academic career ended. As reported in the Times Higher Educational Supplement on 19th July 2018: "For some this might sound like just deserts." Kogan used a Facebook app to harvest profile data from not only those who installed the app but their unwitting friends too. (The Times Higher Education Supplement, 19/7/2018) ⁴

In this example, the media emphasise that the generation and ownership of data by the big technology companies is one of their biggest assets: “Facebook has data that can answer any question I’m interested in.” (The Times Higher Education Supplement, 19/7/2018)⁴ This has implications for the university’s moral structural and moral personal legitimacy, as controlling data creates significant power for technology companies over universities and academics. This may lead to compromised ethical standards as universities and academics seek to gain access.

News media reflects that universities may fail, or not attempt to share, the value they can bring to industry. A common perception expressed in the media is that universities may lack the communication skills to market their value or culturally find the idea of selling themselves a difficult one:

Universities are guilty of underselling their expertise to the business community. There is talent waiting to be liberated in higher education institutions up and down the country. By throwing open the doors of business schools we are starting to realise one of the most important untapped resources for small business. (The Daily Telegraph, 5/6/2014)⁴¹

The lack of effective communication capability may impair a university’s moral structural legitimacy as a strong and well-established academic culture, underpinned by its own rules, idiosyncrasy and jargon, risks forming an artificial bubble. This may both prevent outside access to university resources and insulate academics from external perspectives.

Another difficulty highlighted by the analysis is the availability of third party funding to universities may reduce the innovation productivity of entrepreneurial firms. This occurs because university academics, rather than collaborating with local firms on innovation, prefer themselves to secure third party funding as it directly and positively impacts their personal income and the reputation of their university. University processes are designed and focused on securing such income. This creates “crowding out effects” (Audretsch et al., 2012: 21) where entrepreneurial firms miss out on both funding and academic cooperation.

The accumulation of knowledge should not remain within academia but must be put to use in business (The Times Higher Education Supplement, 25/8/2016)⁸

The analysis identifies that entrepreneurial firms face a further comparative disadvantage as university academics have greater access to human capital (students) and extensive research facilities that are publicly funded. Cognitive legitimacy of the university may be impaired if government policy and/or university entrepreneurial strategy fails to balance the positive aspects of university innovation spilling over into the real economy and the crowding out effects that may constrain the development of entrepreneurial enterprise.

Finally, the analysis emphasises the difference between academic focus and industry focus when describing a university's contribution to regional economic development. The news media highlight that university research by its very nature is predominantly theoretical, targeting a diverse global audience who read international academic journals. Therefore, it often lacks the local context important to regional businesses and industry:

Business school academics still generally achieve promotion by publishing journal articles often focusing on historic US economic data rather than tangible local business questions. A problem that exercised former universities minister Lord Willets when he was in office. (The Times Higher Education Supplement, 7/4/2016)⁶

This creates a tension for a university's moral consequential legitimacy as research outcomes lauded in international journals, bringing cachet to the researcher and the university, often seem irrelevant to regional stakeholders. Similar components of legitimacy may be affected in different ways at different levels of analysis (e.g. individual, intra-organisation, extra-organisation).

In sum, universities may fail to collaborate effectively with industry because of conflicting priorities, failings in communication, competitive needs, and finally, a different focus that prioritises theoretical global issues above local practical needs. Poor collaboration may hinder a university's contribution to regional economic development, reducing its moral consequential and structural legitimacy.

4.7.1.3 University Regional Contribution may be Rhetoric rather than Action

The analysis highlights that a university's strategy regarding regional development may be centred on rhetoric rather than action. The news media perceive that universities will always be motivated to promote their contribution to regional development as this will help secure

external funding and establish moral consequential legitimacy. However, the analysis highlights there is a danger that without corresponding action these claims may appear exaggerated:

The benefits of universities to regional economies have been “greatly exaggerated” and the public cash used to help commercialise research “could even have limited the growth of new firms by coddling them.” Ross Brown, University of St. Andrews. (The Times Higher Education Supplement, 7/4/2016)⁶

This risk is extenuated because a perception exists within the media that universities are, in general, successful in their innovation efforts despite the limited evidence of sustained commercial returns from university research. (The Sunday Times, 4/3/2018)¹⁹⁸ This may result from global league tables that emphasise the quality of research rather than economic results. To maintain moral consequential legitimacy it is imperative that universities produce tangible outcomes that are “assessed not just on quality of research but also their impact.” (The Guardian, 29/10/2015)¹⁴

A further risk of a university’s regional contribution being perceived as rhetoric rather than action relates to the language used to describe its contribution. The analysis identified that terminology describing how a university’s regional contribution is leveraged is not clear or consistent. The language utilised tends to describe generic hard measures such as technology development and not the wider benefits to society such as an educated citizenship, encouraging social enterprise or enhancing the quality of life. This can lead to terminology being perceived as vague and meaningless to the news media. For example the “perceived narrowness of the term ‘technology transfer’, with ‘knowledge transfer’, ‘research commercialisation’, or ‘knowledge exchange’ all suggested as alternatives.” (The Times Higher Education Supplement, 28/2/2019)⁵

Inconsistent language may lead to confusion over what the purpose of a university is. News media coverage of a university’s entrepreneurial contribution to the economic development of their region is often referred to as the ‘third mission’ of the university. But similar terminology is used to describe a university’s engagement with society in delivering its social responsibilities, or the process by which knowledge is transferred into the wider community. (The Times Higher Education Supplement, 7/4/2016)⁶

Such inconsistency may hinder the development of a university's moral consequential legitimacy as university outcomes, unclearly defined, become difficult to measure and therefore their benefit, difficult to articulate.

Finally, the media finds that university rhetoric will often attempt to stress that universities are integral to, and typically drive, the policy setting process for economic development within a region. The reality being they merely contribute as a stakeholder or advisor. This in part may be an attempt to influence funding processes. However, it may create a false impression as to what the university's true accountabilities are:

Universities have captured policy making in this area and cemented the idea that they can act as “quasi-economic development agencies” in the face of evidence to the contrary. (The Times Higher Education Supplement, 7/4/2016)⁶

Such false rhetoric may create unachievable public expectation and lead to reputation damage when regional development outcomes fail to materialise, impacting moral consequential and cognitive legitimacy.

In sum, universities may focus on rhetoric to establish a narrative of regional contribution in spite of their limited ability to act. Exaggerated claims; limited assessment of achieved benefit; the prioritising of hard outcomes and confusing accountabilities may contribute to a reduction in moral consequential legitimacy across the university sector, as heightened public expectation fails to be satisfied.

4.7.2 The Events University Regional Development Contribution (Critical Realist Actual Layer)

The grounded theory analysis of regional development contribution across the university sector yielded two critical realist events. These are: a university must adopt multiple positions to contribute to regional development; and secondly, delivering a regional contribution requires resource beyond the university. The next section considers each in turn.

4.7.2.1 Universities Must Adopt Multiple Positions to Contribute to Regional Development

The analysis shows that a university's contribution to regional socioeconomic development can take two primary positions: *being* entrepreneurial or *supporting* entrepreneurialism.

In '*being* entrepreneurial' the university will directly contribute to regional development by establishing independent commercial enterprises (spin-outs), undertaking activity external to the university with commercial benefit (e.g. consulting) or formally supporting students and staff in starting their own businesses (financing). These approaches to university entrepreneurship share a common characteristic. They are based on formalised or contractual relationships (Rothaermel et al., 2007). Formalised activity receives considerable attention in the news media. For example:

In the past decade the top 10 British universities most active in the creation of spin-outs inspired 281 such companies. Of these, Edinburgh and Strathclyde, the only two in Scotland to feature in the top 10, accounted for 58 (34 and 24 respectively). Top was Oxford (41) followed by Imperial College London (40). Life sciences spin-outs made up the largest proportion of the total for any industry (42%). There are 800 spin-outs in Britain, which have attracted more than £1bn investment over the past two years. (The Times, 11/8/2013)¹⁵⁷

However, the analysis found that formal entrepreneurial contribution to regional development faces several challenges. Firstly, the media present the university that balances academic and commercial responsibilities as one often needing to compromise between academic integrity and commercial viability:

A 2015 study into spin-outs by the Enterprise Research Centre found that for the "majority of academic founders" there were "significant tensions" between their commitments to university academic work and the demands of the embryonic company. Only a quarter of such founders were fully committed to the start-up and the average time commitment was a mere 20 per cent of their working week. (The Times, 10/9/2018)¹⁵⁶

Secondly, the media often highlights a university that encourages students and staff to be entrepreneurial faces the risk that personnel and resources will leave academia to pursue initiatives in the private sector:

A university that ran a scheme for students to take a year out and set up their own business cancelled it when two of the three on a test run were so successful that they did not return. Sheffield University found its entrepreneurship scheme sent students the way of Steve Jobs, Mark Zuckerberg and Bill Gates, who did not finish their degrees. If the scheme had been run on a large scale and two thirds of students had not returned it could have affected the university's degree-completion figures. (The Times, 14/11/2018)¹⁵⁸

Finally, universities may be perceived in the media as being over-greedy when facilitating entrepreneurial ventures emanating from academic work undertaken at the university. For example, universities insisting on large ownership stakes in new ventures run the risk of stifling further external funding as potential investors are deterred by unfavourable risk return ratios.

Nelsen highlighted another difference. At MIT, the company founder, usually a postgraduate academic gives the university a maximum 5% stake. At Stanford, it is typically 10%. Britain's top universities often ask for 50%, with the exception of Cambridge, which usually seeks less. (The Sunday Times, 14/2/2016)¹⁵⁹

The media reflects that such demands may be counter-productive:

For universities it is better to have 10% of something that becomes massive, than 50% of not very much at all. (The Times Higher Education Supplement, 19/7/2018)⁴

The challenges of formalised collaboration identified in the analysis (to academic integrity, of staff/student exodus, university greed) may limit the university's moral structural legitimacy as the academic working environment risks becoming poisoned by a toxic combination of self-doubt and self-interest. Formal collaboration is likely to be based on pragmatic exchange legitimacy, indicating again the internal tensions between different elements of legitimacy operating differently at different levels.

The news media reflects that the majority of successful collaborations are founded on strong pragmatic exchange legitimacy, often involving capital-intensive industries such as manufacturing and pharmaceuticals rather than smaller knowledge driven businesses:

Many of the best examples of collaboration between educational institutions and businesses come from industries with high capital costs such as manufacturing, pharmaceuticals and aerospace. There are fewer to shout about in knowledge-intensive industries, where the UK otherwise excels and where we are likely to see significant change. (The Sunday Telegraph, 17/1/2016)⁴⁸

In contrast to formal arrangements, universities may adopt a more informal position by “*supporting* entrepreneurialism”. Universities adopting this position are perceived by the media as undertaking entrepreneurial activity based on a more relaxed collaboration between the university, university staff and students and external stakeholders. This relaxed collaboration may require robust moral personal legitimacy, as the academic’s interpersonal skills as well as formal knowledge, are needed to create the right environment for innovation.

The analysis found that informal arrangements are more reliant on a deeper integration between the university and its environment encouraging a more holistic systems approach to regional development (Stam, 2015). However, the media perceive that universities tend to underplay, or even undervalue, their informal contributions to regional development such as student entrepreneurial activity:

Often league tables look at the number of students who are in professional employment six months after graduation – so those who decide to launch their own business may not get reflected in the figures. “This has meant that some institutions have focused more heavily on employability than on entrepreneurship,” he adds. Meanwhile, university careers services aren’t necessarily focused on entrepreneurship. “The students we work with tell us that when seeking careers advice, they aren’t encouraged to consider starting something themselves,” says Luk. (The Guardian, 1/3/2016)¹⁶⁰

This may be in part due to the difficulties expressed in the media in quantifying the economic return on informal, softer activities. The inability to accurately measure the contribution of softer activity doesn’t lessen their importance. (The Times Higher Education Supplement, 7/4/2016)⁶ The analysis also reflects that the university may prefer to pursue non-economic goals such as cultural enhancement of its local region by taking on civic roles (Goddard et al., 2016).

Finally, the scope and impact of a university’s entrepreneurial activity may depend on whether the university is a research intensive or teaching intensive institution (Abreu et al., 2016). This

does not imply teaching intensive universities are less entrepreneurially productive rather they operate on different levels. The news media reflects that teaching intensive universities tend to focus on local entrepreneurialism rather than the global perspective of research universities. This may give teaching intensive universities a collaborative advantage based on moral personal legitimacy, as they may be better able to leverage connections and networks in the local and/or regional economy. Particularly those links to local employers, as student employability is often a critical factor and measure of a successful teaching led university highlighted in the media:

The University of Central Lancashire (UCLan) is one of the institutions searching for a solution. It has created a regionally focused Centre for SME Development, where local businesses are given free membership and access to the university's support and expertise when it comes to addressing concerns around skills, growth, funding – and of course, productivity. (The Daily Telegraph, 24/9/2018)¹⁶¹

The analysis finds this is supported by endogenous growth theory that argues Russell Group universities make most economic impact through the creation of 'spin off' enterprises, whilst non-Russell group universities contribute to economic development primarily through the creation of knowledge capital or knowledge transfer (Guerrero et al., 2015).

In sum, a university can adopt different positions when influencing regional development. Formal, contractually founded positions focus primarily on pragmatic exchange legitimacy and are typically profit motivated. They do however encompass risk that may have a negative impact on the moral structural legitimacy of the university if formal contracts breakdown or fail to be delivered. Informal approaches, though not without risk, do present opportunities for the university to build not only positive, moral personal legitimacy, but also consolidate the cognitive legitimacy of the university sector as the public begins to recognise a university's social contribution.

4.7.2.2 Delivering a regional contribution requires resource beyond the university

The spilling over of university research into local industry and other regional innovation systems is thought to have a positive impact on regional economic development. However, Casper (2013) argues the quality of the regional social structure (including factors such as the density of contacts - the entrepreneurial network) in which the university is located, will have a significant impact on the university's ability to commercialise its IPR.

The analysis identifies several factors outside the core responsibilities of the university that must be present if a university's contribution to regional development is to be realised.

Firstly, the analysis highlights the production of knowledge can typically occur anywhere, but the utilisation of knowledge and the process of commercialisation, tends to occur in a specific local context. Thus, universities are likely to undergo a process of hybridisation when seeking to commercialise innovation that optimise local networks (Deem, 2001). This may impact the university's moral structural legitimacy, as university processes and culture will need to reflect more closely the characteristics of the external environment upon which the university depends. However, the news media reflects this may be challenging as local success often receives less attention than the identification of global problems:

He talks about the university's strategic commitment to making a social impact, and his desire to lever its expertise to boost the county's education, health, business and culture for all its residents, not only students and staff. But Petford believes the work of his and other universities in their local communities is taken for granted by central government. "A university like ours that is really punching well above its weight in terms of social impact doesn't get any recognition for what it does." (The Guardian, 21/8/2018)¹⁶²

As such, the media often present universities as neglecting the importance of local government structures, preferring instead to influence national policy outcomes, often with little success. This may result from weak pragmatic exchange legitimacy as universities fail to recognise that local authorities are becoming more influential stakeholders in encouraging entrepreneurialism in the region, taking over from central government initiatives. (The Independent, 30/5/2014)³⁴

Secondly, the media reflects that the benefits of academic entrepreneurship are often over-estimated and despite government policies and incentives to promote and support university/industry collaboration, their success is typically dependent on the internal politics of the university, relationships between stakeholders and most importantly the specific local context of the collaboration (Fini et al., 2011).

Since the process of spinning out technology from a university and commercialising it in a private company involves numerous stakeholders, from different disciplines and with

different expectations, it is an inherently complex process that can be fraught with the risk for conflicts. Disagreements can spring up over the valuation of intellectual property, commitment from academics and where to focus sales efforts, to name but a few. (The Times, 10/9/2018)¹⁵⁶

Finally, in attempting to maintain moral consequential legitimacy through micro-management and quality control, the university may be constraining its own innovation through a lack of external exposure. The analysis shows once an enterprise has emerged as a result of university entrepreneurship (a spin-out) and is operating in an external, commercially driven marketplace, further intervention and support from the university will have a detrimental impact on the new enterprise's operating performance (Hayter, 2013b). News media reflects this may be predominantly due to overly bureaucratic and risk adverse university governance constraining risk/reward decisions and an inability to accept learning from failure as innovative necessity.

Britain has three of the world's top 10 universities, according to the Times Higher Education rankings, but they fall far behind American counterparts in creating companies. Entrepreneurs complain that universities demand too much of a stake. Industry experts and investors claim that promising ideas born at British universities are not spreading their wings fast enough and good technology is being shelved. (The Times, 5/2/2017)¹⁶³

Similarly, the media reflects that university specific funding and support mechanisms may help establish an embryonic venture, but only third party investment or venture capital will sustain and develop a venture, and thereby make a tangible impact on regional development. (The Times Higher Education Supplement, 7/4/2016)⁶

In sum, in order to make a tangible impact on regional development universities must recognise the characteristics of the external environment will be the dominating attributes and not the university's internal capabilities. A university's entrepreneurial endeavour needs to be set free, in order to succeed or fail, recognising that failure is often critical to innovation. If not, a paradox may occur where a university that over prioritises moral consequential legitimacy (outcome quality) may in fact be constraining regional socioeconomic development. And thus, reinforcing the impotence of the university's regional contribution.

4.7.3 University Regional Contribution Legitimising Mechanisms (Critical Realist Real Layer)

The following section details potential causal mechanisms for the experiences and events of 'University Regional Contribution'. Two casual mechanisms have been identified: the intrinsic nature of knowledge; and secondly, the power of informal, personal networks.

4.7.3.1 The Intrinsic Nature of Knowledge

A causal mechanism or structure constraining the regional contribution of the university may be the characteristics and nature of knowledge. For university knowledge to make an effective regional contribution, the university must consider both the subject and format of knowledge.

In deciding which *subject* of knowledge to pursue the university will consider not only its own interests but also those of its most important stakeholders. The search for research funding is increasingly important to universities and is consequently prioritised by academic staff and incentivised in reward structures (bonus payments for research) and career progression (positioned in salary and promotion negotiations). However, as most research funding comes from large, established firms, universities and academic staff are more likely to prioritise relationships with large businesses, nationally or even globally located, to the detriment of small, regional entrepreneurial enterprises. Hence, the focus of university research will tend to reflect the needs of global corporations rather than those of the local community. Thus, a 'crowding out' effect is created where universities compete against local entrepreneurs rather than support them, thus limiting the university's regional contribution (Audretsch et al., 2012).

This effect may be countered by the coming together of individual university faculties and local firms with shared knowledge interests. Firms may cluster in specific regions forming a commercially focused network, facilitating the transmission and absorption of knowledge (Piore and Sabel, 1984). This network-perspective is centred on the unique characteristics and properties of the knowledge, and the network may operate as a meta-organisation where entrepreneurs, firms and academics collaborate to enhance absorption of tacit knowledge across the network (Saxenian, 1996).

A second consideration when understanding the effectiveness of a university's regional contribution is the *format* of knowledge facilitating the collaboration. New or highly innovative

knowledge may be difficult to capture and communicate externally to the human capital, or more simply, the human mind from which it originates. This is especially true of innovation or knowledge where existing language, syntax or symbols may be limited in their ability to convey emergent ideas. This constraint means that knowledge often remains geographically constrained (Audretsch et al., 2012). The transfer of knowledge happens through physical interaction between human capital where simultaneous demonstration, explanation and questioning can easily take place. Such interaction may not be as readily simulated remotely or as easily understood. Therefore, a physically imposed constraint limits the reproduction of knowledge to locations close to the source of knowledge. Similarly, if the geographical area in which the knowledge originates comprises a high population density of like-minded individuals, it is likely that more interactions will occur regarding the knowledge and therefore the likelihood of 'spill-over' from a university to local industry will increase (Hayter, 2013b).

In sum, a university's contribution to regional development is likely to be affected by the intrinsic nature of knowledge. Universities will pursue subjects consistent with the needs of those stakeholders providing funding: typically global players with a global focus. This is likely to favour those universities located in close proximity to such global players, as the format of new knowledge ideally requires personal interaction to support its transmission. This raises the probability of innovation hotspots forming, or more typically, the consolidation of existing hotspots that reinforce prevalent university hegemony.

4.7.3.2 The Power of Informal Personal Networks

Traditionally, theory dictates that the effectiveness of technology transfer from university to the region has been predicated on: the research endowment of the university (Powers and McDougall, 2005b); the prestige and reputation of the university (Sine et al., 2003); and organisational practices and funding (O'shea et al., 2005).

However, Casper highlights that the San Francisco region creates twice as many new ventures as the Los Angeles region despite the presence of similar status and scale universities and only marginal extra funding. He argues the increased regional contribution of San Francisco is predicated on the quality of personal networks within the region: "The embeddedness of university scientists within a regional economy can influence the ability of the university to commercialise research" (Casper, 2013: 1322).

This implies that university knowledge does not cascade in one direction (into industries within a given region) rather a circular relationship is formed where university and industry knowledge flows back and forth, via social interactions, creating better informed research objectives, more likely to succeed commercially.

These networks and relationships are typically informal and may be facilitated by intermediaries. Clarysse (2014) argues that academic and industry networks are often disconnected, thereby creating the need for an intermediary to bridge. Without such intermediaries commercially focused formal structures within the university (e.g. the creation of technology transfer offices) may fail to deliver anticipated benefits. The established formal structures may fail to account for the academic's personal motivation (furthering personal research, misalignment with academic identity), an academic's capabilities (commercial skill, management experience) or business understanding of academic process or culture (Hayter, 2016).

The actions of personal networks and intermediaries foster an environment that is conducive to innovation and growth, creating an entrepreneurial ecosystem comprising many stakeholders including industry, academia, government and the public (Stam, 2015). Innovation is not a function of the university that delivers outcomes to the region. It is an environmental process where academics form a small part.

In sum, formal alliances between industry and the university are likely to be only partly successful in their contribution to regional development. Formal alliances may facilitate one-off, easily understood or sequentially developed innovation, but they will face challenges in nurturing emerging ideas where outcomes are unclear and responsibilities span theoretical and applied considerations. This form of innovation is made possible through informal dialogue and the socialisation of knowledge (Lee et al., 2010) facilitated by strong yet informal academic/industry networks.

4.8 The Changing Purpose of the University

To varying degrees, the university has always served the public. The “publication of research and production of graduates” (Etzkowitz et al., 2000: 314) are commonly cited as ways in which the university contributes to society and are often referred to as the university’s first and second missions. More controversial is the university’s third mission, which has been broadly referred to as the entrepreneurial activities undertaken by the university to improve its and/or the regions economic outcomes (Etzkowitz and Leydesdorff, 2000). The purpose of the university typically depends upon the balancing of these three missions.

The following section considers the impact of a market-led, entrepreneurially driven university sector on the ‘purpose of the university’. This ‘purpose of the university’ is a theoretical concept that emerged during a grounded theory analysis of news media and academic literature addressing the legitimacy of the entrepreneurial university. This section will document the findings of this analysis aligned against a critical realist framework describing how the purpose of the university is experienced, the observable events relating to university purpose, and finally, the causal mechanisms of university purpose that may influence the legitimacy of the university.

4.8.1 *The Experience of the Purpose of the University (Critical Realist Empirical Layer)*

A grounded theory analysis of newspaper media yielded three critical realist experiences related to the purpose of university. These are: to enhance the fabric of society; to act as a custodian of learning and knowledge; and thirdly, to be autonomous from state control. The following section considers each in turn.

4.8.1.1 The University Should Enhance the Fabric of Society

A commonly understood goal of the university is to improve today’s society through research and innovation, and ensure tomorrow’s society has the skilled people needed to maintain its prosperity and safety (Fuller, 1989). However, the analysis found that enhancing the fabric of society might not be a priority for a university operating within a market led environment.

Instead, the university may be inclined to focus on: maintaining its financial integrity; adapting to global needs; and finally, upholding public relations.

The analysis found that a market led university needs to maintain its financial integrity. However, the increased focus on economic returns puts at risk the university's cognitive legitimacy as non-economic benefits to society become marginalised. For example, the media highlight that opportunities for the commercialisation of university research may lead to academics choosing research areas based on profit and return rather than public need:

The commercialisation paradigm insists, just as the 19th-century laissez-faire ideology did, to the detriment of education, that publically funded institutions must provide a quantifiable return on investment. (The Sunday Times, 17/6/2012)¹⁶⁴

Consequently, general economic prosperity enhancing the fabric of society may be thwarted if university produced knowledge is commoditised (e.g. the commercial sale of intellectual property to a private organisation). This may create a transaction cost that constrains the leverage of knowledge by industry or society as a whole (Rosenberg and Nelson, 1994). The news media reflects that government may need to intervene if the privatisation of knowledge creates quasi-monopolistic positions that are against the public interest, for example, research on the human genome project. (The Times, 7/6/2006)¹⁶⁵ The news media highlights a further criticism of the entrepreneurial university relating to the retention of economic gains by the university. The media reflects the argument that since the majority of research undertaken at universities is publically funded, either by the state or through charitable funding, the economic benefit of such research should be returned to the public or the IPR made freely available to all firms in the marketplace. (The Guardian, 13/9/2018)¹⁹⁹

Next, the university may become preoccupied with the need to adapt to global challenges rather than enhancing the fabric of society. The analysis found that the increasing global nature of today's society has redefined the role of a public good university. The public good was traditionally a concept defined in a local context. However, due to the global nature of today's university sector, the media highlights the requirement for a global public good ideal to build new legitimacy. (The Times Higher Education Supplement, 6/10/2016)⁹¹

The cognitive legitimacy of the university may also undergo a form of redefinition, as the global nature of society becomes increasingly knowledge based rather than structured around physical

capital. The news media reflects that university activities will increasingly encompass intangible assets that will be difficult to value in terms of public benefit:

The central problem is that knowledge is a (global) public good, both in the technical sense that the marginal cost of someone using it is zero and in the more general sense that an increase in knowledge can improve wellbeing globally. Given this, the worry has been that the market will undersupply knowledge and research will not be adequately incentivised. (The Guardian, 19/10/2017) ¹⁶⁶

The analysis highlights the perceived global need for knowledge positions human capital as a critical factor of production. This again may redefine what cognitive legitimacy is for the university, as the shift from an elite based higher education system to one supporting mass education is seen to be serving the capitalistic need for production resource. The media reflects that many universities may no longer be “devoted to ‘inculcating the spirit of the humanities’ and infusing society with their occasional wisdom. They have drifted from this essentially scholarly ideal to become a generational rite of passage.” (The Guardian, 31/5/2019) ⁵³

The university focus on global needs may also diminish their role in sustaining national identity. News media reflects that the construction of national identity requires a balanced contribution from a range of public institutions including government, industry, the Church, universities and charities. Abdicating such responsibility may have an adverse impact on the fabric of society and therefore impair the university’s cognitive legitimacy. (The Guardian, 3/4/2012) ⁵⁵

Finally, the analysis highlights that the university may prioritise upholding public relations above enhancing the fabric of society. The news media reflects an increasing focus on ‘public engagement’ as the university’s third mission. As if embarrassed by the ‘*entrepreneurial*’ narrative, universities have begun to emphasise the role of their ‘*social engagement*’ (McNall et al., 2009). In addition to further confusing the ‘third mission’ of the university (responsibilities of the university beyond teaching and research), the analysis suggests engagement is often perceived in the media as a cynical attempt to influence public opinion.

Highlighting engagement as a distinct ‘third stream’ of the academic mission has doubtlessly supported its acceptance and development. However, the risk of such characterisation is always marginalisation: designating engagement as a worthy but too

often peripheral activity, to be brandished when politically expedient or when funding is at stake. (The Times Higher Education Supplement, 8/12/2016)¹⁰

A university's engagement activity was perceived in the media to be high on positive community orientated rhetoric, but low on action or tangible results:

While engagement strategies may be well articulated (and always enlivened with imagery), the study published in the Journal of Academic Research in Management, shows that they are seldom translated into meaningful changes to the academic enterprise. (The Times Higher Education Supplement, 8/12/2016)¹⁰

The analysis found the focus on engagement within the university mirrors that of corporate social responsibility. Corporate organisations are increasingly likely to utilise social responsibility as a means to enhance the value of their brand (Sweeney and Coughlan, 2008) and improve their corporate reputation through communication of their positive social performance (Deegan et al., 2002). The risk is that a university's effective marketing of their engagement in society is conflated with its traditional purpose of enhancing the fabric of society. Marketing most readily addresses a university's moral consequential legitimacy, where positive university outcomes are accentuated. However, if these outcomes fail to align to societal need the university may be endangering its cognitive legitimacy.

In sum, the analysis found the traditional purpose of the university to 'enhance the fabric of society' is being challenged in three ways in a market led environment: an over emphasis on financial performance; the university's focus on global needs; and thirdly, a cynical interpretation of engagement. If the purpose of the university fails to enhance the fabric of society in the eyes of the public, cognitive legitimacy may be eroded.

4.8.1.2 The University Should Act as Custodians of Learning and Knowledge

Paradoxically, the advent of the knowledge society, whilst increasing the importance of universities in the eyes of policy makers, has led to a more instrumental utilisation of learning and knowledge e.g. how can learning and knowledge contribute to economic outcomes, rather than the pursuit of knowledge for the sake of knowledge. The analysis identified several ways in which the university's custodianship of knowledge may be compromised, affecting the

university's purpose and ultimately its legitimacy. These potential areas of compromise include: learning capabilities, pedagogy and the university's role as the conscience of society.

The first area of compromise concerns learning capabilities. A characteristic of the knowledge society is that new knowledge becomes obsolete very quickly as businesses innovate to gain competitive advantage (Lundvall et al., 2008). This creates the need for people to be constantly learning and building new capabilities. The cognitive legitimacy of university will be highly dependent on satisfying this need. The news media reflects the critical need for universities to nurture the generic ability to think and critique amongst its students and staff in addition to teaching specific content knowledge: "University should be all about perfecting people's ways of thinking and perfecting their ability to study and find out about themselves." (The Times, 30/11/2015)²¹ Additionally, when teaching specific content knowledge, the media highlights that the scholarly process should reflect the interplay between theory and practice recognising the importance of knowledge grounded in experience: "Scholarship for its own sake is less interesting than scholarship that contributes to effective action in the world." (The Times Higher Education Supplement, 3/1/1997)⁷¹ Finally, as universities start to adopt increasingly entrepreneurial outlooks the news media highlights the danger that traditional academic study and reflection, with no obvious economic gain, may become marginalised against those activities producing financial gains: "Universities should continue to be places of study and reflection, not entrepreneurial factories." (The Independent, 1/1/2017)³⁷ Hence, the analysis finds that the university's cognitive legitimacy may be compromised if the learning capabilities of the university fail to develop critical learning skills, reflect practical needs or fail to facilitate personal reflection and development.

The second area of compromise concerns pedagogy. The analysis highlights that new digital technologies and communication methods will enable new ways to create and understand knowledge that universities need to embrace whilst balancing normative and instrumental motives: "It is argued that to be a university, a university needs to be a player in new analysis and knowledge generation" says Professor von Prondzynski. (The Higher Education Supplement, 6/12/2012)⁸⁶

The analysis highlights that universities face a key challenge relating to teaching and creativity in a digitised age. It is argued that "creativity, design and innovation are at the heart of the global knowledge economy" (Peters, 2011: 80). However, the news media reflects there is a risk that entrepreneurial universities equate creativity with innovation targeting economic productivity.

This may privilege subjects that score highly on instrumental measures such as anticipated graduate salary. This will favour STEM and finance subjects over those in the arts and humanities:

For universities, the increasing focus on graduate salaries as a measure of success is undermining courses in the creative arts. However, it is crucial that we protect creative education – it provides the skills our knowledge economy will need in a future where jobs will be increasingly automated. (The Guardian, 14/9/2017) ¹⁶⁷

Cognitive legitimacy may be refined as the public's accepted paradigm for the university is replaced by a new set of capabilities leveraging contemporary culture and technology. However, cognitive legitimacy may be lost if the new technology enabled paradigm is grounded in instrumental need at the expense of human and cultural fulfilment.

The final area of compromise concerns the university's role as society's conscience. The advent of mass communication and the Internet has decentralised the production of information and knowledge. No longer is information the purview of institutions such as governments, state broadcasters, businesses or universities. Information production and dissemination has been democratised across billions of global Internet users (Benkler, 2014). The analysis finds the role of the university in such a system of knowledge diffusion is questionable but critical. Universities must retain their autonomy and independence to maintain public trust and their cognitive legitimacy.

Anna Glass secretary general of the Magna Charter Observatory acknowledged "Institution autonomy was essential as the basis for the university's legitimacy as an essential pillar of society." (The Times Higher Education Supplement, 27/9/2012) ⁷⁹

In today's world of fake news and echo chamber opinion, the integrity of knowledge and information is intrinsically linked to the owner and voice of that information. The news media perceive that the actions of universities, as well as the knowledge they produce, will be critical in influencing the public's faith in the institution and therefore reinforcing its cognitive legitimacy.

A good university is still the nearest a secular society gets to a sacred institution. (The Guardian, 31/5/2019) ⁵³

Therefore, to maintain cognitive legitimacy universities must deliver on their responsibility to act as “critics of society” (Shattock, 2005: 17). The analysis finds this may generate a creative tension, where the university finds itself admonishing society of the principles, duty and morals laid down by society itself:

It is critical that we enshrine in law the principles of academic freedom and freedom of speech, alongside protecting the sector’s ability to act as society’s conscience. (The Independent, 1/1/2017)³⁷

In sum, the analysis found that universities acting as custodians of learning and knowledge will protect their cognitive legitimacy. To achieve this, universities must look to minimise the affects of compromise on learning, pedagogy and being society’s conscience. It should focus on the process of learning as well as its outcomes, ground teaching in contemporary technology and culture, ensure creativity is not constrained by profitability and understand that being critical requires both autonomy and integrity.

4.8.1.3 To Achieve its Purpose the University should be Autonomous from State Control

Academic autonomy from the state is often presented as an important purpose of the university. Autonomy from government provides for an independent challenge to government direction and policy and is perceived as essential for the functioning of democracy, where universities are best governed in a “self-organising, free and openly critical manner” (King et al., 2011: 418).

The cognitive legitimacy of the university requires a university’s actions to be both predictable and plausible. Predictability is facilitated by the ability to control one’s actions free from third party influence, generating natural responses aligned to environmental expectations. Plausibility is achieved when actions reflect the cultural and constitutional needs of the environment in which they are enacted (Suchman, 1995).

The analysis shows that even in a market-led context, encouraging open competition through de-regulation and private provision, the state will still try to control the manner in which universities discharge their accountabilities. For example, the news media often highlight government intervention attempting to improve the quality of university outcomes and drive more value from the system:

Fast-forward 50 years, and the balance of power is very different. Johnson is tsar of English higher education. With the new Office for Students, the onside regulator of universities, he commands all he surveys. To be registered higher education institutions, universities must take part in the wretched and discredited Teaching Excellence Framework, which claims to measure the quality of teaching, despite the fact they will no longer be able to increase their fees if they get “gold” awards. (The Guardian, 7/11/2017)¹⁴¹

The analysis recognises a paradox exists whereby policies driven by instrumental economic need, facilitating financial independence by removing the student cap and allowing universities to raise revenues through tuition fees, are often accompanied by interventionist policies reducing university autonomy to secure non-economic objectives in the national interest (Beerkens, 2008).

The news media highlights how governments justify intervention as a form of student empowerment. This is often expressed as a conflict between university autonomy and the need to increase student rights:

The bill would also allow a new Office for Students more power over traditional university hierarchies, a move Lord Patten said would give the ability to strip older universities of their ancient charters. (The Independent, 2/1/2017)³⁸

Cognitive legitimacy may be adversely impacted if stakeholders in the university feel they have little influence over the university’s direction. However, if the myriad of stakeholder opinion leads to volatility in strategy and direction, the university may be seen as being unpredictable. This may also impair cognitive legitimacy.

News media also highlight that university actions deemed to be socially irresponsible, either by government directly or in response to public opinion, may lead to challenges to university autonomy. For example, the practice of making unconditional offers (autonomy to select which students it wishes to admit) has received considerable negative media coverage:

While it is for universities to decide which students they admit, this autonomy rightly comes with a responsibility to maintain the high standards and fairness that applicants, their parents, teachers and future employers rightly expect. The past year has seen

concern in the media over the use of some unconditional offers, which do not depend upon meeting specific grades in upcoming exams. The spotlight has fallen on these types of offers with conditions attached, whereby an offer can become unconditional if other factors are met, such as the applicant making that university their first choice. (The Times, 22/7/2019) ¹⁷⁵

Cognitive legitimacy may be eroded if the public sense the actions of the university are implausible, in that they fail to meet social expectation (unconditional offers perceived as a form of bribery). In this case government intervention may help to maintain legitimacy.

In sum, a primary purpose of the university to be autonomous may be challenged by government intervention in at least two ways: attempting to enhance student influence; and secondly, correcting the actions of the university deemed socially irresponsible. If university autonomy is overly impacted the public will rightly question the purpose of the university in providing an independent voice that supports the functioning of an effective democracy. This will fundamentally impact the university's cognitive legitimacy.

4.8.2 The Events of the Purpose of the University (Critical Realist Actual Layer)

Grounded theory analysis of the purpose of the university yielded three critical realist events. These are: the increase in illegal activity related to the university; specialising universities have a different purpose to traditional universities; and thirdly, the rise of a market-led university sector has increased the politicalisation of the university sector. The next section considers each in turn.

4.8.2.1 The Increase in Illegal Activity Related to the University

The news media reflects an increase in illegal activity and dubious practices in relation to the university, as market led imperatives become more prevalent. Illegal services and dubious practices include: the surfeit of unaccredited providers; the ability to secure fake qualifications; illicit student behaviour; and finally, instances of bribery.

Opening up the university sector and allowing new privately run organisations to enter, has created an opportunity for unscrupulous providers. Aided by the government challenge of

providing effective quality control and accreditation, unscrupulous providers have targeted vulnerable young people. This doctoral study has previously addressed the establishment of bogus universities in the recruitment of overseas students to circumvent immigration controls (section 4.4.2.2) but not all illegality is as clearly defined. The media reflects a long history of bogus universities in the UK offering dubious quality services and fake degrees.

As early as 2005, an investigation by The Times Higher Educational Supplement found the official list of universities and colleges in the UK contains a number of businesses without recognised accreditation. This included a London-based private university offering unaccredited degrees and a private college that shares its name, address and phone number with a partner university that admits to having: “no UK approval of its quality or its teaching content and methods.” (The Times Higher Educational Supplement, 1/4/2005)⁷⁶

Such illicit activity continues to be extensively reported in the media:

Seventy-five bogus universities have been closed in the past four years, amid warnings that the business in fake degrees is undermining the reputation of the UK higher education system around the world. (The Guardian, 8/4/2019)²⁰¹

The incidence of bogus universities has been accompanied by the increasing availability of fake qualifications. Such crime may develop in a market system where vulnerable people are unable or unwilling to pay market price. As degrees become more expensive to attain, cheaper or even illegal means to secure a degree may emerge to meet less scrupulous demand:

The international reputation of UK universities is being put at risk by the increasing number of diploma mills that use UK addresses to sell fake degrees. (The Times Higher Education Supplement, 23/12/2005)⁸⁸

News media highlight that fake degrees could be provisioned in several ways. This includes those issued by bogus non-existent universities, or even more worrying, utilising reputable universities to create bogus certificates. This may ultimately impact the legitimacy of genuine qualifications, and in turn, the moral consequential legitimacy of the university sector if the integrity of university outcomes are questioned:

Graduation is a significant milestone in anybody's life, however students are being warned against posting graduation 'selfies' over fears innocent photos may be aiding counterfeiters. Logos, crests, signatories, stamps, holograms and wording can be easily copied onto fake certificates. (The Independent, 8/7/2016) ⁶⁷

The increasing availability of fake qualifications is further complicated by the complexity of accreditation of providers based across international boundaries. In the absence of an international oversight body the liability resulting from illegal activity lies with the student:

It is the student's responsibility to ensure credits, degrees or certificates from the institution will transfer to other institutions or meet employers' requirements. (The Times Higher Education Supplement, 1/4/2005) ⁷⁶

This may affect the pragmatic influence legitimacy of the university if the shared interests of the university and student become compromised by one-sided liability.

In a market for higher education students pay a price for the educational services of a university, leading to the re-definition of university outcomes in monetary terms (what is my degree worth?). When university outcomes do not meet student expectations the transactional nature of the student/university relationship may lead to undesirable behaviours. For example, paying *money* for a university education, or paying *more money* for a *successful* university education. Examples of such behaviour have been reported in news media:

A failing student who offered his University of Bath professor £5000 cash in a bid to pass his degree was jailed for 12 months". The judge in this case recognised that if the student had been successful they would have: "undermined the integrity of the universities in the UK and the legitimacy of degrees from universities in UK. (The Independent, 23/4/2013) ⁶¹

The appearance of such stories increases public awareness of illicit practices and may impact cognitive legitimacy as questions are raised about the possibility of other instances that have not been detected or have gone unpunished. Other illicit behaviours highlighted in the news media include the use of essay factories, plagiarism and cheating.

Reports suggest plagiarism is rife in universities. The internet has provided a “wealth of information that can be plagiarised”, says Wendy Sutherland-Smith, an expert in plagiarism from Deakin University. As a result, a Times investigation two years ago found almost 50,000 students were caught cheating in the previous three years, amounting to a so-called “plagiarism epidemic”. The government and universities are meanwhile desperately trying to crack down on essay-mill websites, which write essays for paying students. (The Guardian, 30/12/2017) ¹⁴⁷

Finally, the analysis highlights a perception that the pursuit of profit is an unworthy practice that may in itself lead to illicit behaviour. As the university sector becomes more market led there is a danger that commercial goals will outweigh academic goals. This may damage the cognitive legitimacy of the university by shifting academic motivation from a collegial orientation, to one focused on personal financial goals. For example quoting Lord Chris Pattern, Chancellor of Oxford:

“To give the impression that one goal is to inject a shot of entrepreneurial vim, so that universities can replicate the energy and outlook of – who shall we say, [former BHS owner] Philip Green? – Seems unlikely to convince those who work in and study at our universities that ministers understand and care much about what they are doing.” (The Observer, 31/12/16) ⁴⁹

In sum, the growth of illegal activity across the university sector has been highlighted in the analysis. Illegal activity may be a sign that the purpose of the university is being shaped more by self-interest than public benefit. As the market-led approach to higher education becomes more prevalent a conflict occurs where academic achievement is seen increasingly in financial terms. This risks normalising the view that one can pay for academic achievement, whether legally or illegally, which will have a negative cognitive impact on university legitimacy. Illicit behaviour will always attract media attention and therefore influence university stakeholder opinion. If the public believes that the market can be compromised through illicit behaviour legitimacy will be lost. The rarity of such activity will provide little consolation, as public confidence will be eroded by the fear of what remains unreported: “The possibility that similar cases may go unreported leaves the question hanging in the air for a lot of people” stated Professor Graves of the University of Bath. (The Times Higher Education Supplement, 2/5/2013) ⁸⁴

4.8.2.2 Specialising Universities have a Different Purpose to Traditional Universities

The common view that universities need to teach and research across breadth of subjects to be legitimate is being challenged by the emergence of specialist organisations focusing on one discipline and/or subject. The media highlight that these new universities often operate under a 'for profit' business model and are focused on the delivery of a service, rather than the creation of new knowledge:

Professor von Prondzynski challenges the legitimacy of single-subject universities: "I believe that the future of higher education will involve much more in the way of institutional specialisation. But the essence of the modern academic life lies in trans-disciplinary knowledge and discovery and it is hard to see how a single-issue college can cover that." (The Times Higher Education Supplement, 6/12/2012)⁸⁶

In specialising in a single area, the university is limiting the potential of innovation occurring at the boundaries of different knowledge areas and/or disciplines. The analysis highlights the danger of the university becoming viewed as a training organisation, responsible for the production of capability-specific human capital. In becoming such, cognitive legitimacy may be impacted as universities lose the ability to democratise the formulation of knowledge, where students of different disciplines and world perspectives debate ideas to create new ideas (Delbanco, 2014).

The analysis identifies that the emergence of single subject specialist universities may bring into question the conditions and processes for granting university status. Widening the criteria of what is means to be a university may lead to more diverse forms of higher education and increase student choice. The news media reflects however that such diversity requires enhanced forms of quality control to reflect different priorities:

Simon Renton, president of the University and College Union, said: "Given BPP's parent company's record stateside, we are surprised the Government has granted BPP a university title. We have serious concerns that this move could open the floodgates for more for-profit companies to become universities. A quick glance across the pond warns us of the risks associated with that sort of move." In the States for-profit companies have swallowed billions of dollars in public funds in return for derisory graduation rates, crushing levels of debts and degrees of dubious value. (The Times, 8/8/2013)¹⁷⁰

In sum, opening up the market for higher education has allowed a diverse selection of new providers to enter. To create competitive market positions these new providers will adopt radically different operating models to traditional universities (for example single subject teaching) which may change our understanding of what it means to be a university. If government accreditation processes fail to provide coherent justification or subsequent quality assurance is lacking, public understanding of the purpose of a university may be compromised leading to reduced cognitive legitimacy.

4.8.2.3 The Increased Politicalisation of Higher Education

An argument presented to support the role of the market in higher education was the devolution of power away from central government towards the consumers of higher education, the students, in order drive better educational outcomes (Naidoo et al., 2011). However, government priorities often oscillate between the need for equality and demonstrating meritocracy, resulting in a dynamic policy landscape that may be seen as continually challenging the purpose of the university.

The news media highlight that the purpose of the university was fundamentally challenged by government policy that positioned university access as an entitlement rather than an aspiration. This was grounded in the belief that expansion would stimulate economic growth and prosperity (Dollar and Kraay, 2004) whilst also supporting social mobility (Milburn, 2012).

Fair access and widening participation are not, as some in the Russell Group seem to believe, irritating impositions of leftwing politicians; nor are they acts of noblesse oblige charity. (The Guardian, 3/4/2012)⁵⁵

Despite widening access the analysis found that social mobility has been constrained by the ability of elite universities to maintain restrictive selection processes that target privileged students rather than a broader range of suitable qualified individuals from non-privileged backgrounds (Vedder, 2007). The news media perceives this often leads to political intervention to redress the balance.

Not so long ago, David Lammy, the Labour MP for Tottenham, used the Freedom of Information Act to show that in 2015, 82% of Oxford offers went to students in the two

top socioeconomic groups; Cambridge was hardly any better. The racial and wealth profile of both universities is woefully unbalanced – the same is true of other leading Russell Group universities. (The Times, 1/8/2019)²⁰⁰

The analysis identified that the level of tuition fees the student is charged has also become highly politicalised. The failure of fees to differentiate the quality of education received by the student has led to a call for change. Tuition fees should create a price mechanism that can segment the market for universities services (Jiménez-Castillo et al., 2013). However, supported by the results of raising the cap on tuition fees to £9000 in the UK in 2012 where almost all universities increased their fees to the cap limit regardless of university and/or course quality (Brown, 2012a), the news media highlight the perception that the price mechanism is ineffective:

Some of Britain's most prestigious universities do not offer a high enough "quality and intensity of teaching" to demand students pay £9,000 a year, a leaked government document has revealed. When the coalition raised tuition fees to a maximum of £9,000 a year it was argued that only those institutions who deserved to charge that much would increase prices. However many of the country's leading universities picked the maximum amount. Education across the spectrum – from some in the Russell group to courses through FE [further education] colleges – do not offer the quality and intensity of teaching we expect for 9k. (The Daily Telegraph, 18/4/2016)¹⁷¹

The cognitive legitimacy of the university may be put at risk if the public has no means to make sense of the differences in capability and quality across the sector. If economic principles (e.g. rules of demand and supply) that operate successfully in other sectors do not apply to the university sector, the university sector may appear chaotic and incomprehensible. The failure in price mechanism has led to further government intervention attempting to resolve its inadequacies. For example, the analysis identifies that the introduction of the 'Teaching Excellence Framework' was an attempt to reassert the market-led and privatised rationale of earlier regulation (Neary, 2016).

Additionally, the ineffectiveness of market mechanisms such as tuition fees may provide justification to open political debates across conflated topics that may lead to further public discontent. The news media reflects an increasing emphasis on the trade-offs between young and old (for example, by conflating arguments regarding student loans and pensioner benefits):

He denounced the conservatives for accusing Jeremy Corbyn of offering to abolish tuition fees to “bribe” young voters when he said they had been doing the same with the “triple lock” on pensions. (The Independent, 7/7/2017) ⁴⁰

Finally, the analysis highlights that government funding may be needed to support research where the market fails to do so. The need for investment to fund the cost of groundbreaking research may be prohibitive for the private sector due to the unpredictability of outcome and the non-guarantee of investment returns. The news media reflects the need for state intervention to fund such research will be highly political.

The greatly extended systems of higher education and research we possess today simply would not exist without public patronage. State funding, for all the clutter of politically generated “themes” and “priorities” is the best guarantee of open science (The Guardian, 3/4/2012) ⁵⁵

In sum, the analysis has highlighted a market-led university sector will not necessarily change the purpose of the university to reflect privatised values rather than public ownership values. This may be explained by continued government intervention in the sector: “The free market view is that state intervention should be reduced to a minimum, although paradoxically strong regulation is needed in order to facilitate marketisation.” (Neary, 2016: 693) If the purpose of the university is ever changing or compromised due to the tension between market mechanisms and politically driven government counter measures, a chaotic interpretation of the university may arise that affects its cognitive legitimacy.

4.8.3 The Purpose of the University Legitimising Mechanisms (Critical Realist Real Layer)

The following section details potential causal mechanisms for the experiences and events of the ‘purpose of the university’. Two casual mechanisms have been identified: institutional inertia; and secondly, public expectations.

4.8.3.1 Institutional Inertia

‘Institutional Inertia’ is a causal mechanism impacting the purpose of the university. The institutional inertia of the university represents a resistance to change enabled by a psychological

investment in the past. It comprises three components: vested personal interests; legacy structures and processes; and finally, technology and internal capability constraints. Each component may represent an individual causal mechanism, but for the purposes of this analysis they will be considered as a holistic mechanism.

Many universities are structured around faculties. The stability of the faculty environment allows individual academics to invest their expertise into faculty knowledge assets or the faculty knowledge base providing the teaching and research foundation for each faculty cohort. Changes to the faculty knowledge base tend to take place in evolutionary rather than revolutionary steps and large-scale modifications to faculty assets such as the curriculum are often viewed as inefficient uses of time and money (Cummings, 1990). This environment is similar to that of Kuhn's (1970) 'normal science' where academics work within an established paradigm, an environment in which they are considered expert. Knowledge claims are assessed by the commitment of individual faculty members to the truthfulness of faculty knowledge (Young and Muller, 2007). They become invested in that truth and as such create personal vested interests that may influence the purpose of the university.

The purpose of the university will be challenged when the university is evolving from one mode of operation to another (for example, from a research university to an entrepreneurial university). Each mode of operation will be grounded in its own structures and processes. This will create two distinct organisational spheres (cultures old and new) that may exist at the same time, each with equal legitimacy (Etzkowitz, 2003). This gives rise to a conflict of interest, which may force a re-evaluation of the university's purpose. This may involve a reassessment of all ethical codes generating a new third position, rather than the rejection of one side or the other to adjudicate what is now legitimate. Alternatively, the conflict of interest may be resolved through separation, either through prohibiting one sphere or allowing both to co-exist. A final option is to attempt full integration and alignment of ethical codes and purpose. The integration approach provides opportunity. Separation is expensive (maintaining two spheres) and may miss innovation opportunities existing at the boundary. However, integration will require revised structures and processes to define the obligations of all parties and formalise a new role (or purpose) for both the individual and institution, creating a significant change challenge. Etzkowitz (2003) argues that universities will adopt a separation approach when the new purpose of the university is conflated within existing missions and will select an integration approach when the new purpose is explicitly recognised.

The third component of institutional inertia is the technology and internal capability constraints faced by the university. It is not realistic to assume all universities are homogeneous and start from the same position, or possess the required technological or internal capabilities to drive the transformation required to prosper in a market-led university sector. Therefore, it cannot be assumed that all universities will be able achieve a similar endpoint or disposition (Bratianu and Stanciu, 2010). The prioritising of commercial opportunities alongside the traditional public good purpose of teaching and research may be therefore unrealistic for some universities and attempts to do so may result in reduced performance in core areas. This may lead to a loss of public trust in the university (Slaughter and Rhoades, 2004).

In sum, the causal mechanism, institution inertia, has been identified comprising: vested personal interests; legacy structures and processes; and, technology and internal capability constraints. Institutional inertia exists in all institutions to some degree and its specific configuration will affect the changing purpose within individual universities.

4.8.3.2 Public Expectations

The purpose of the university will not be shaped by internal institutional considerations alone, but also by the expectations of the public it serves. Public expectations are dynamic and will require continual adaptation of the university's purpose (Sporn, 2001). Public expectation is likely to be shaped by the university's value to society and the perception of the university's success.

Public expectation of the university will be influenced by the value attained by society from university endeavour. During the 20th century government policy, driven by public need, shaped the activities of the university to support "social reform and processes of democratisation" (Scott, 2011: 61). Universities were acutely aware of their public obligation and society gained value through higher education institutions who "sought congruence between social utilities and social values associated with or implied by their activities" (Theus, 1993: 278). As public expectation became increasingly influenced by economic imperatives the purpose of the university began to reflect the "astonishing displacement of 'society' within the late modern educational pattern" (Cowen, 1996: 151). During this time the value to society took the form of social and technological innovation aimed at improving economic outcomes and the quality of life. Further adaption of university purpose has occurred in response to public expectation with regard to internationalisation (increasing trade and competition between nations) and globalisation (increasing integration of state policy structures and the homogenising of national

culture) (Marginson, 2006). With each adaptation, the university attempts to encapsulate its relationship with society through an evolving purpose. However, the direction of causality is important. Does the university purpose change in response to public expectation, or do the actions of the university revise public expectations? This analysis assumes a circular relationship of co-dependency. However it is recognised as public expectations become more instrumentally grounded (hard economic outcomes rather than those improving the fabric of society) the relationship between public expectation and university purpose becomes more loosely coupled.

The public's expectation of the success of the university sector will also influence the university's purpose. Success creates an impression of value, of worthiness of the object considered to be successful. Global university league tables and ranking systems are important vehicles in which the success of a university is conveyed. These are widely reported across news and media channels, thereby creating a reliable proxy of public perception and opinion (Roberts and Thompson, 2007). Whilst rankings have been shown to influence student choice the impact is only marginal (Broecke, 2015). Rankings exert a bigger influence on the university sector as a whole through government intervention and on the strategic choices of individual universities (Ordorika and Lloyd, 2015).

In the same way that high-ranking institutions create a positive discourse that may generate inward investment there is a risk that if one or more UK universities begin to drop in ranking, a negative discourse will be established. Critical analysis reveals that this discourse is open to manipulation to achieve policy or institutional aims, regardless of actual performance (David, 2016). For example, by highlighting positive aspects of US or Chinese performance a negative perception of UK universities can be formed. As such, university rankings in themselves do not shape university stakeholder opinion. It is the discourse created by government and/or university actors that provides the context in which the purpose of the university responds. Therefore, university purpose can be said to represent the strategic intent of hegemonic interests (Wright and Greenwood, 2017).

In sum, expectations comprise two interrelated forces: a demand-side force where society seeks value from the university; and secondly, a supply-side force where the expectations of university success shapes university stakeholder opinion. The relationship between the public's expectation of university value and university success is dynamic and often dialectic. As such public expectations are an important mechanism having causal influence over the purpose of the university.

4.9 Summary: Analysis and Findings

This section has provided a detailed description of the analysis and findings of a doctoral research study on the legitimacy of the entrepreneurial university. The methodology underpinning the analysis was a novel construct of grounded theory and critical realism where eight theoretical constructs or grounded theory axial-code conceptual categories were aligned against a critical realist framework comprising domains of the empirical, the actual and the real (Bhaskar, 1978). The uniqueness of the study has given rise to several distinctive findings that extend existing literature on the entrepreneurial university.

Firstly, the majority of the eight conceptual categories identified are based on the continuous and inseparable interaction between the university as an organisation and the context, the environment, in which the university sits. This differs from existing theoretical models of the entrepreneurial university presented by scholars including: Guerrero and Urbano (2012); Nelles and Vorley (2011); Clark (1998a); and Sporn (2001), where the university is a discrete object operating as an open system that receives input (challenges) as the dynamics of the environment change, leading to an internal university response. This study has found that aspects of the university and environment are intertwined to provide a unified object of analysis. For example, the conceptual category 'economic sustainability of the entrepreneurial university' identifies that university expansion funded by borrowing intrinsically links university capability to the socioeconomic characteristics of the university's specific environment, thus finding that what works for one university will not necessarily work for another. In this way, university investment decisions operate as a closed system comprising dependent internal university capability and external environment characteristics. This is further emphasised by the conceptual category 'regional contribution' that finds it is the characteristics of the environment that dominate over the capabilities of the university when assessing the university's regional contribution.

Secondly, each of the eight conceptual categories analysed display circular patterns of interaction where change in one part of the system is linked to change in another part of the system. Sometimes the change is facilitated through a dialectic relationship where two opposing forces interact (e.g. growth in overseas students has marginalising affects on domestic students), or through positively correlated loops (e.g. greater emphasis on transactional relationships creates more legal redress activity).

Thirdly, each of the eight conceptual categories exhibits complexity and volatility where interacting forces are continuously searching for equilibrium. Each category operates under the conditions of nonlinearity and uncertainty, yet are continuously able to establish order (for example, political policy volatility contributing to entrepreneurial university economic sustainability).

In sum, the analysis has shown that market-led principles have had a profound affect on both the university and its environment. Starting from the 'prevalence of marketisation' and ending in the 'changing purpose of the university', the analysis has found the entrepreneurial university to be an indistinguishable product of self-determination, environmental influence and government intervention. As such the researcher partly disagrees with one popular view that:

“The government has run a market experiment through the bloodstream of our university system, and have a classic case of understanding the cost of everything and the value of nothing.” (The Independent, 1/1/2017)³⁷

Instead, the complex interaction of many factors internal and external to the university, seen and unseen have combined to create new opportunities and value. The cost of this integrated entrepreneurialism may yet be borne by a weakening of university legitimacy. But equally, academic innovation and a necessitating environment may provide just the authority required for the university to prosper in a 21st century where the only constant is change.

The final sections of this doctoral research study will bring together the findings across all eight conceptual categories to create and present an innovative conceptual framework for Entrepreneurial University Legitimacy (EUL). Conclusions will be presented detailing both theoretical and applied considerations before closing with a statement on the limitations of the study with associated recommendations for future research.

5 Discussion

In previous chapters, this doctoral study presented two important pieces of analysis. Firstly, a literature review described the salient stages underpinning the emergence of the entrepreneurial university. This included a description of the factors that make up legitimacy, how scholars have defined the entrepreneurial university concept and the leading theoretical frameworks describing its operation. Secondly, a detailed analysis was presented based on the novel fusion of grounded theory methodology and critical realist philosophy that identified eight grounded theory axial-code conceptual categories or theoretical constructs. Each construct was retroductively analysed to identify the experiences, events and causal mechanisms that shape the legitimacy of the entrepreneurial university.

The final part of this doctoral study will bring together the findings of the literature review and grounded theory analysis to create an innovative and original conceptual framework describing the legitimising mechanisms for the entrepreneurial university. As such, the conceptual framework presented provides a representation of grounded theory's 'core category' in which, after constant comparison, the central theme of the study emerged integrating all the categories and theoretical constructs of the analysis (Glaser, 1992).

The central theme identified asserts that entrepreneurial universities should not be represented by traditional approaches to organisational theory where the university is depicted, as an open system interacting with its environment and change is a product of this context. Rather, the legitimacy of the entrepreneurial university is best represented using the metaphor of 'autopoiesis' (Maturana and Varela, 1991) describing organisational change as "a closed system of interaction and that the environment is *part* of the system's organisation because it is part of its domain of essential interaction" (Morgan, 2006: 245). As such the 'legitimacy of the entrepreneurial university' is characterised as an autonomous, closed system capable of achieving a stable pattern of function that moves towards equilibrium through self-referential adaptation.

The two remaining chapters of this study will discuss firstly, the innovative conceptual framework that brings together the eight theoretical constructs, detailing what entrepreneurial university legitimacy comprises and secondly, how legitimacy in the entrepreneurial university organises

and operates. The concluding chapter of this doctoral thesis summarises key findings, draws conclusions and makes final recommendations.

5.1 Conceptual Framework

A critical finding of the study is entrepreneurial university legitimacy is founded on interacting theoretical constructs both internal to and external from the university. Legitimacy cannot be created through internal agency, nor does it form as a public perception in the world outside the university. The typical view of an organisation as an open system in a continuous exchange with its environment, where input and output flows stimulate internal adaption, seems a limited interpretation. It fails to explain for example, why increased university competition may lead to poorer outcomes for the student, or how the need to reduce government funding can lead to increases in Vice Chancellor remuneration.

The study asserts that entrepreneurial university legitimacy is based on theoretical constructs that create a system that is self-referential, autonomous and closed. As such it operates like the process of 'autopoiesis' (Maturana and Varela, 1991) where the self-production of legitimacy is enabled through "a closed system of relations" (Morgan, 2006: 243).

The assumption of a closed system is controversial, especially when aligned against a critical realist philosophy. The study justifies this assertion because the conceptual categories that emerged during the grounded theory analysis represent sets of interacting relationships between elements of the university *and* its environment that form *durable* theoretical themes (transactional relationship, university competition etc.). This does not imply 'entrepreneurial university legitimacy' is isolated from the world or is an artificial construct where certain environmental variables are controlled for modelling purposes. In the Entrepreneurial University Legitimacy (EUL) conceptual framework the university is not a system open or otherwise. Rather the system is the thematic composite of university and environment elements that "close in on themselves to maintain stable patterns of relations" (Morgan, 2006: 244). The system is considered closed because the adaption required to move to a state of equilibrium can only be made with reference to already known elements (i.e. those within the system).

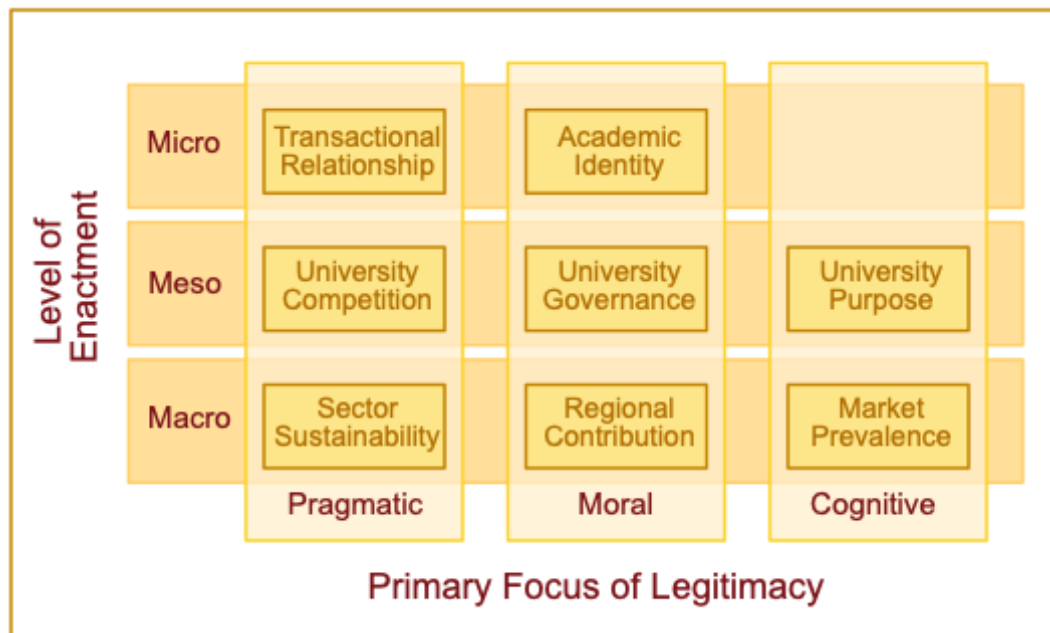
The EUL conceptual framework is described in two ways. The constitutive description details what theoretical concepts comprise entrepreneurial university legitimacy. The performative description details how entrepreneurial university legitimacy organises and functions.

5.1.1 Constitutive Entrepreneurial University Legitimacy

The constitutive description identifies what theoretical concepts must be deployed and the levels at which the concepts primarily interact, to form legitimacy in the entrepreneurial university. The conceptual framework creates a closed system that subsumes phenomena usually characterised as peripheral to the university and part of its external environment. As such relevant elements of the external environment are constituted as part of the system's internal organisation. The identified theoretical concepts comprise many sub-components that form a string of essential interactions that determine the shape of legitimacy. The patterns of legitimacy created can only be understood holistically, supporting the claims of critical realism where "philosophy does not speak about a world apart from the world" (Bhaskar, 2016: 3).

As the world outside the university operates on multiple scales, to subsume the required externalities, the constitutive description of the conceptual framework comprises multiple levels: the micro, the mesa and the macro. Levels represent the different ways in which entrepreneurial university legitimacy is engaged or enacted.

Figure 2 – EUL Conceptual Framework: Constitutional Structure



Source: Author's Own

The micro level of interaction describes entity, agent or stakeholder response to dynamic relationships that are internally determined. The properties of the micro layer are described by the *responsibilities or actions* of specific agents or entities, for example, the role of trust in

academic identity. This level is typically dominated by the actions of individuals working for, studying at, or interested in, specific individual universities.

The meso level of interaction describes the procedural or *process* response to a system relationship, comprised of enabling forces such as collegiality, university management practices and transparency. This level is typically concerned with the strategic or management actions of specific individual universities.

The macro level of interaction describes the *contextual* forces shaping the relationships of entrepreneurial university legitimacy. Contextual forces may be defined by policy, institutional traditions or social/cultural norms. This level is typically focused on the external forces (e.g. government, transnational regulatory systems, university representative bodies) that shape and influence the university sector, rather than specific individual universities.

The EUL conceptual framework vertically integrates the major dimensions (pragmatic, moral and cognitive) of Suchman's (1995) theory of legitimacy across the micro, meso and macro scales. This allows the eight theoretical concepts to be aligned horizontally and vertically within the conceptual framework. It should be noted that the alignment of theoretical concepts is based on dominating characteristics rather than exclusivity. For example, the theoretical concept 'academic identity' though primarily grounded in moral legitimacy, has a secondary association with pragmatic exchange legitimacy, created by the relationship between academic identity and public access to academic knowledge.

To provide further elucidation, it is useful to compare salient features of the EUL conceptual framework to those of the leading conceptual frameworks previously identified in the literature review.

The EUL conceptual framework bounds into a closed system only those elements displaying a relationship between entrepreneurialism and legitimacy, regardless of whether they are internal or external to the university. In doing so, the EUL conceptual framework limits the scope of the entrepreneurial university response allowing a greater depth of analysis. Earlier theoretical frameworks such as 'Entrepreneurial Architecture' (Nelles and Vorley, 2011) attempt to model the internal dynamics across the entire university and therefore address concepts such as culture, systems, leadership, structure and strategy. Focusing on factors pertinent to legitimacy alone, this study limits analysis of certain characteristics deemed low on influence (e.g. culture)

whilst developing richer detail in other areas (e.g. university governance rather than the generalised 'systems' category).

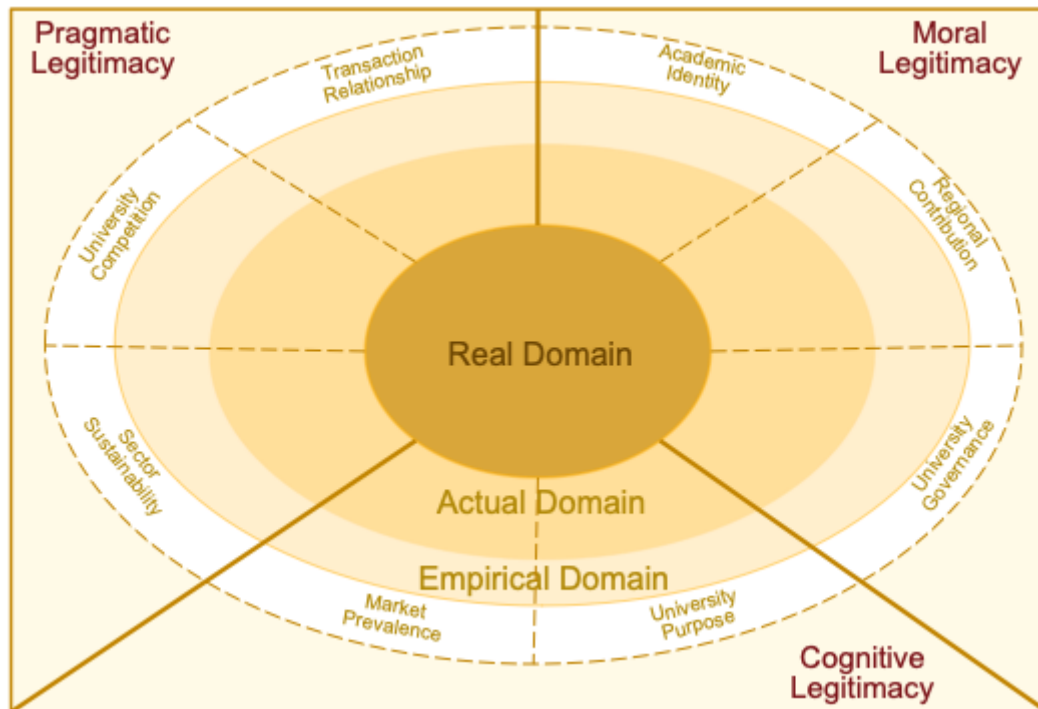
The conceptual model developed by Guerrero and Urbano (2012) utilises the theory of Institutional Economics (North, 1990) to develop a framework to explain the creation of entrepreneurial universities through the identification of formal and informal factors. The analysis is grounded in a literature review of empirical studies, predominantly observational university case studies. This sets the entrepreneurial university apart from its environment as a discrete object. The context in which the university resides is purely viewed as a set of opportunistic outcomes. As such the university acts as an "egocentric organisation" (Morgan, 2006: 248) that overemphasises the significance of its own contribution above that of its external associations. The EUL conceptual framework is grounded in documentary data (newspaper and media articles) providing a holistic perspective of the university with regards to entrepreneurialism and legitimacy. As such, the external environment is given an equal weighting to the university with regard to the causal significance of entrepreneurial university legitimacy.

The 'triple helix model' (Etzkowitz, 2015) shares several characteristics with the EUL conceptual framework. Firstly, it emphasises reflexivity and a recursive process of adaption. Different institutional functions cooperate to pursue opportunities that are continually reviewed and adapted, stimulating and enhancing the capabilities of interacting institutions. The system is "grounded in the culture which it has to reproduce" (Etzkowitz and Leydesdorff, 2000: 119) where knowledge or new services are generated endogenously. Secondly, in emphasising reflexivity, the triple helix model utilises feedback loops instead of control mechanisms. Similarly, legitimacy in the EUL framework is not something that can be strategically determined, but instead emerges in response to the properties of causal mechanisms, events and experiences. Thirdly, the triple helix model rejects the traditional linear model that emphasised entrepreneurial market pull or technology push mechanisms. Similarly, in the EUL conceptual model, legitimacy is not a consequence of a specific observable event rather it forms when certain causal mechanisms and structures are present or active. However, a key difference to the EUL conceptual framework is that the triple helix concept is modelled at the level of social structure. The EUL conceptual framework asserts that legitimacy may coalesce through individual experiences and/or the active presence of organisational procedures and processes, in addition to social structures like those contributing to regional socioeconomic development.

5.1.2 Performative Entrepreneurial University Legitimacy

The second description of the EUL conceptual framework details the performative configuration of entrepreneurial university legitimacy. The performative description details how entrepreneurial university legitimacy organises and functions.

Figure 3 – EUL Conceptual Framework: Performative Structure



Source: Author's Own

To describe the performative nature of the EUL conceptual framework, a critical realist understanding of ontology is adopted comprising three domains: the empirical, the actual and the real.

The outermost layer, the empirical domain, holds human experience gained through the five human senses. The middle layer, the actual domain, is where events occur whether they are observed or not. The innermost layer, the real domain, contains all the structures and causal mechanisms, likely to be hidden from empirical observation, that cause events to happen.

As figure 3 (above) depicts, legitimacy is formed through the interaction of human-experience (the empirical domain) and human understanding of what it means to be legitimate. It is the space where ontology meets and *consumes* epistemology. As Bhasker argues “the world must

include our beliefs about the world. For anything with a causal effect must be admitted to be real" (2016: 39). In this way, when we develop a theory (e.g. entrepreneurial university legitimacy), the theory will influence our experience of the world and how we act in the world creating new events. This is referred to as a "double hermeneutic" (Giddens, 1984). As new events create new experiences, the practice of change is observed to operate as a loop. Therefore, the EUL conceptual framework rejects the idea of sequential and linear causality, in favour of a mutual causality facilitated by a closed system of circular relationships. This is further complicated by the presence of interacting opposing forces that initiate dialectic change. For example, the imposition of government market controls alongside policies promoting the privatisation of university services. As such, the relationship between cause and effect is non-linear, continually dynamic and influenced by all elements of the system.

The grounded theory analysis suggests that the identified theoretical concepts act in such a way to maintain legitimacy. If an action or condition causes disequilibrium within the system, an opposing force or condition is often invoked to redress the imbalance. As such, the system prioritises self-preservation through self-replication.

The innermost layer of the EUL conceptual framework, the real domain, contains all the causal mechanisms (structures) that initiate change within the system as the causal mechanism's properties (i.e. powers and liabilities) are triggered. The presence of a causal mechanism does not guarantee a predictable response. The causal mechanism may be inactive or weakly structured (e.g. national populism in the 1990's) or the mechanism's impact may be counteracted by another causal mechanism. For example, the causal mechanism 'power of informal networks' may be mediated by the obfuscation of discourse (a liability of the mechanism 'intrinsic nature of knowledge') or enhanced by personal research motivation (a power of the mechanism 'psychological employment contract'). This implies that although a mechanism may be present no causal regularity may ensue. The interaction of causal mechanisms can be considered analogous to a complex system.

Interaction on the boundary between the real and actual domains leads to observable events that shape legitimacy in the entrepreneurial university. Reflecting its multifarious nature, this interaction has been described as "causal complexity" (Hood, 2012). Unpinning causal complexity, relationships between the entities of the real and actual domain can be either necessary or contingent. Relationships are said to be necessary when a mechanism or event cannot exist without the other. For example, the causal mechanism 'hegemony of the university

sector' will have a necessary relationship to 'ranking systems', if 'ranking systems' are the preeminent tool to differentiate university performance and reputation.

Relationships are said to be contingent when they may, though not always, affect one another. For example, the mechanism 'student number volatility' has a contingent relationship to the event 'overseas student revenue'. If UK universities face reputational damage from the impact of Brexit (increased 'student number volatility') we may expect some, but not all, overseas students to look elsewhere (decreased 'overseas student revenue').

Figure 4 (following page) demonstrates the complexity of the EUL conceptual framework. The relationships between causal mechanisms and structures (found in the domain of the real) and events (the actual domain) are highlighted through a connecting line. Figure 4 makes no reference to whether the relationship between mechanism and event (depicted by the connecting line) is necessary or contingent. As every university is unique and set within its own unique context the practical application of the conceptual framework for a specific university will produce different applied configurations. In this way the conceptual framework is a tool to help a university understand its own environment, to reflect on its own reality. The EUL conceptual framework does not represent truth, but a starting point to work through complexity and uncertainty.

As previously stated, causal mechanisms or even events do not themselves confer legitimacy. Legitimacy is in part socially constructed through the amalgamated human *experience* of university entrepreneurialism (in the empirical domain). This implies further complexity, as entrepreneurial university legitimacy becomes hermeneutically dependent with different interpretations of reality possible. However, the extent of social construction is limited by accepting the reality and influence of the domains of the real and actual. The EUL conceptual framework therefore does not espouse to truth, rather it provides a model grounded in data reflecting university stakeholder opinion regarding university legitimacy where truth claims can be critiqued. It provides a practical application for understanding the antecedents and consequents of entrepreneurial university legitimacy.

5.1.3 EUL Conceptual Framework Summary

This section has presented an overview of the proposed EUL conceptual framework. The constitutive description highlighted the components that made up the framework. This aligned

the structural characteristics of the theoretical concepts against the facet of legitimacy they most strongly influenced. The performative description highlighted how the framework operates.

Figure 4 – EUL Conceptual Framework Complexity



Source: Author's Own

Ontologically founded, the conceptual framework details the complex relationships between mechanisms and events that are non-linear, mutually causal and continually dynamic in nature.

Two critical features are highlighted that differentiate the Entrepreneurial University Legitimacy (EUL) conceptual framework from previous frameworks. Firstly, the EUL conceptual framework is a closed system of theoretic constructs that interweave university and environment functionality into a unified, composite thematic process. It is a process-based perspective that differs from earlier theoretical frameworks that presented a discrete functional portrayal of the university operating as an open system within its environment. The EUL conceptual framework emphasises the importance of the interrelatedness between university and environment, whilst earlier frameworks emphasised the salience of the university. Secondly, the EUL conceptual framework

aims to further professional knowledge over purely academic knowledge. As such, understanding the relationships between mechanisms and events, necessity and contingency, allows policy makers and university managers to rethink traditional perspectives on hierarchy and control; the implications of managing within a changing context; and finally, the importance of continuous organisational transformation.

5.2 Personal Reflection: An Evaluation of the Research Process

An important personal objective for the researcher was to undertake a study that grounded its findings in objective evidence rather than subjective observation. The literature on the entrepreneurial university is dominated by case study methodology where changes are often described, but not theorised (Sotiris, 2012, Stam, 2015). As an alternative, this research study chose to ground its findings in independent data, namely newspaper and media articles concerning the university, entrepreneurialism and legitimacy, as these are considered pivotal in the formation of university stakeholder opinion and in the setting of political agendas (McCombs, 2018).

Research has shown that newspaper articles are an important source of information for the public with regard to education (West et al., 2011) and hence will be influential in shaping public opinion on educational issues (Croteau et al., 2015). However, they present several problems.

Firstly, there is a huge amount of data available, which raised a critical question: should the study focus on depth and select a discrete area of study (e.g. relationship between Vice Chancellor pay and entrepreneurial university legitimacy) or should the focus be broad, attempting to capture the numerous elements of legitimacy. The latter path was chosen for its relevance to practice. The strategic need for universities and policy makers to understand the determinants of legitimacy for practical application aligned to the researcher's vocational needs as an advice-giving management consultant.

Secondly, journalistic bias was manifest, with reporters repeatedly writing about the same subjects and expressing consistent opinion. It was important not to let the work of a specific journalist dominate the study. This was increasingly important during 'theoretical sampling' when searching for additional data to expand and/or confirm previously identified categories. Strong and well articulated opinion, or even engaging styles of writing, were likely to attract the researcher, supporting the argument of Layder et al. (1993) that grounded theory looks to

confirm what is already apparent. In managing this risk, the researcher took to creating mini biographies of journalists in the form of memos to help cross-reference and curtail selection.

Finally, the use of newspaper articles alone restricts the capacity to validate the findings of the study through 'triangulation by data' (Denzin, 1970). To overcome this limitation increasing reference to academic literature was made during the later stages of data analysis and during the interpretation of findings, following the guidelines of Creswell and Plano-Clark (2007). In addressing these three issues, the findings of the study are representative and consistent of the body of data, in which they are grounded (Corbin and Strauss, 1990). This in part way satisfies the criteria of 'credibility' as defined by Lincoln and Guba (1985).

Comparison of the study's findings grounded in source data (newspaper articles) and the academic literature on the entrepreneurial university showed that the incidence and salience of issues was similar, partially satisfying the criteria of 'confirmability' as defined by Lincoln and Guba (1985). However, several mercurial positions were identified warranting further exploration.

Firstly, the news media emphasised the risk of excessive university financial borrowing, but the issue receives little attention in academic research literature. This may be explained by the strategic nature of such borrowing and the necessity for confidentiality (from both the university and lender); the difficulty in assessing the financial return on such investments; and finally, its relative importance (individual university financial liability versus university sector funding as a whole). Currently the negative consequential impact of adverse borrowing has not been felt (e.g. a university bankruptcy). If this occurs academic attention will undoubtedly increase (Huber, 2011).

Secondly, the news media emphasised university corruption but this receives little attention in the academic literature. This may be explained by the fact that scandal sells newspapers: "The good news about bad news - it sells" (The Guardian, 4/9/2007)¹⁸⁷ and therefore such stories will receive disproportionate attention in the media. From the university perspective, the increase in marketing and reputational management emanating within the university executive (Chapleo, 2004) is likely also to act as a disincentive for serious academic investigation.

The researcher rejects the argument of Thomas and James who espouse grounded theory is a "sleight of hand" (2006: 790), a pseudo scientific method that both ignores the complexity and

richness of the original source data whilst marginalising the role of the researcher. The researcher found that the integration of grounded theory and critical realism enabled a form of analysis that could search beneath the words on the page (of the analysed newspaper articles) to identify the hegemonic discourse capable of creating structures that influence the behaviour and thoughts of the public and thus help shape legitimacy. Rather than limiting the role and contribution of the researcher, this provided a high degree of creative flexibility through its retroductive approach. Retroduction allowed the researcher to oscillate between both inductive and deductive reasoning to shape emerging theoretical constructs (Blaikie, 2009).

The researcher not only identifies theoretical categories from the data through inductive reasoning (vanilla grounded theory), but also looks to compare the emerging categories with existing theory. The researcher accepts and embraces the lack of neutrality in this process, acknowledging the theories selected are likely to be those the researcher finds persuasive, or equally, unreasonable, but justified because both are capable of testing and stretching the researchers own ideas through comparison. Are these emerging theories original if they are in part grounded in existing knowledge? Yes, as the similarities and differences of the comparison require explanation, which leads to more theoretical sampling of data (deductive reasoning), identifying further properties of the emerging theoretical categories.

Hence, emerging theory is constantly compared to existing theory, leading to refinement and corroboration. The researcher found this led to feelings of vacillation and insecurity, as despite many months of analysis, the recognition dawned that a definite theory or answer would never be found. Instead, the researcher recognised that the knowledge produced was always going to be provisional, partial and subject to judgemental evaluation and revision. This realisation could be the most significant finding of the study.

6 Conclusions and Closing Remarks

The previous chapter brought together the complete findings of the doctoral study to present an Entrepreneurial University Legitimacy (EUL) conceptual framework that describes what constitutes and impacts legitimacy in a university sector driven by market imperatives. The study has found that the relationship is complex and often chaotic. There is no simple answer for what a university must do to build or maintain its legitimacy. Each university has a unique context that demands a distinctive approach. However, the EUL conceptual framework provides a guide, a checklist to understand the university's exposure to those risks affecting its legitimacy. As such, this theoretical construct is a tool to be used by practitioners, including both university administrators and policy makers. To emphasise the EUL conceptual framework's practical and applied propensity, this final chapter will bring together some preliminary conclusions, with implications for policy, university management and individual academics. This will illustrate how the legitimacy of the entrepreneurial university is affected at each specific enactment layer of the conceptual framework (e.g. micro, mesa, macro).

After presenting its initial conclusions the chapter will close with final remarks describing ethical considerations and the limitations of the study, with associated suggestions for future research.

6.1 Conclusions

Three initial conclusions have been identified. These relate to: the fragmentation of the UK university sector; inadequate strategic planning at university level; and thirdly, the marginalisation of academics.

6.1.1 *The Fragmentation of the UK University Sector*

At the *macro level* of enactment, the study concludes that the fragmented nature of the UK university sector embodied by multiple representative bodies characterising different perceived quality tiers, may lead to public confusion and an adverse impact on cognitive legitimacy, especially with regard to international markets. Section 4.6 of the study suggested that competition between universities might reify an already tiered university sector. Such competition has led to a divergence of strategy. Some universities have looked to lower their academic standards in order to maintain market share, whilst others have looked to trade on

their reputation and prestige (Pucciarelli and Kaplan, 2016). This has led to a widening of the reputational gap across the university sector. In section 4.1 the study highlighted how market controls such as league tables and ranking systems reinforce status making it more difficult for newer universities to compete. If uncompetitive practices coincide with difficult trading conditions as described in section 4.4 (funding risk, declining overseas students and political volatility), the probability that a university will fail will increase significantly. Section 4.6 described how a university bankruptcy might lead to a contagion across the sector, impacting significantly the sector's cognitive legitimacy, if the public begin to lose faith in the permanence of the university.

Competition that overly fragments the UK university sector may also lead to practices perceived as improper by the public. Practices such as unconditional offers and grade inflation identified in section 4.6, are becoming an increasing concern for the public, with implications for a university's moral structural legitimacy. Section 4.8 described illegal activity such as fake degrees, plagiarism and essay factories that may further fragment what it means to be a university by creating an underbelly of illicit services.

Fragmenting the UK university sector may also risk devaluing the contribution teaching-led universities make to the UK economy as the hegemony of the elite universities (described in section 4.6) monopolises the public perception of university quality. Elite universities (those established pre-1992) are typically differentiated from newer universities (established post-1992) in terms of "research activity, economic resources, academic selectivity and social mix" but the difference in teaching quality is far less significant (Boliver, 2015: 623).

In attempting to raise quality standards through competition that fragments the market, policy makers need to be aware that for every winner, there has to be a loser. The consequences of reflecting relative performance in such a way may create an overly negative perception that devalues the collective reputation of the UK university sector, thus impacting its cognitive legitimacy. As highlighted in section 4.1, reduced cognitive legitimacy also puts at risk a major trade export opportunity for the UK. In an increasingly competitive international market UK universities need to operate as a collective where the "brand takes on increasing importance" (Lomer et al., 2018: 148). Strong cognitive legitimacy will be essential in creating a compelling international brand for the UK university sector.

In sum, competitive practices, essential to the functioning of any market, will naturally differentiate suppliers within that marketplace. For the university sector, this risks the fragmentation of a collective reputation. If the public perceive that the UK university sector is comprised of ‘the good, the bad and the ugly’, the collective reputation that underpins cognitive legitimacy will be compromised. This will be particularly relevant when developing the export potential of the UK university sector that requires strong collective branding. To endear a more collective spirit and reduce fragmentation the university sector should look to establish a single body of representation for the whole sector (and abandon segmented self-interested factions such as the Russell group), whilst implementing robust accreditation guidelines for what it means to be a UK university.

6.1.2 *Leveraging Robust Strategic Management*

At the *meso level* of enactment the study concludes that the university should look to enhance its strategic management processes to maintain its moral structural legitimacy. An interesting finding of the study was the complete absence of strategic planning references in the data. An interpretation of this may be that universities conflate their entrepreneurial activity with strategic planning and management. Universities have a long history of strategic planning. Entrepreneurial universities often boast of having a long-term vision, 5-year plans, expansion schemes and investment strategies (Immordino et al., 2016). However, these only partly represent what it means to be strategic.

Strategic planning in the majority of UK universities is grounded in the government process underpinning the university funding cycle and on the requirements laid down by funding councils (Chakravarthy and Henderson, 2007). Government policy positioning higher education remains highly influential in the strategic planning activities of individual universities (Altbach et al., 2009). This leads to an internally focused approach driven top-down by the university executive that if perceived negatively risks the collegiality of the university as described in section 4.2 of this study. A further challenge to effective strategic planning is the risk-adverse nature of the traditional university (detailed in section 4.1) that may constrain ambition to only those activities that are proven or predictable. This may lead to strategic plans that are “more symbolic than real” (Dill, 1996: 36). The requirement to administer the planning process is demanding for both management and academia. Section 4.2 highlights how moral structural legitimacy may be affected by an overly managerial approach to governance that burdens the academic with

monitoring and reporting responsibilities and constrains the time available for teaching and research.

The study has highlighted several areas where current strategic planning approaches may be insufficient. Section 4.2 described how the different and dynamic external settings for each university lead to divergent university configurations. The imposition of generic template strategies promulgated by government bodies or copied from other institutions, will likely fail to reflect the unique complexity of the university's external context and thereby impact its moral structural legitimacy. Section 4.6 highlighted how competition is encouraging universities to think and act in global terms despite not fully appreciating the risks that may be present. Section 4.5 described how university stakeholders are increasingly seeking legal redress, potentially leading to an increased exposure to financial and reputational risk that may affect the cognitive legitimacy of the university.

To overcome these challenges the study concludes that a university's strategic planning activity should broaden its consideration of external factors and stakeholder needs. In Section 4.7, the study highlighted how the university may need to adopt multiple positions in response to the dynamics of the external environment. A well-defined strategic plan that is inflexible or unresponsive will reduce the university's moral structural legitimacy. Section 4.7 also highlighted that regional development requires resources beyond the university. Effective strategic planning should consider external stakeholder needs as well as internal needs.

In sum, to maintain legitimacy, the university must recognise that government policy and state-centric funding requirements are no longer the principle drivers of its strategic planning activity. The increasingly complex, crowded and globally orientated university sector, driven by market imperatives, requires a strategic approach centred on the external environment configuration and stakeholder need (Schofield et al., 2013).

6.1.3 *Marginalising the Academic*

At the *micro level* of enactment, the study concludes that the university should look to ensure that the role of the academic is not marginalised in a university led by market imperatives. The study identified that the influence of the academic may be constrained in two ways: top-down by the imposition of a managerial culture (e.g. NPM) and bottom-up by the increased powers of

students reclassified as consumers. The outcome of such academic marginalisation is likely to impact the university's moral structural legitimacy.

The entrepreneurial university's embracement of a managerial culture may devalue the academic role. Section 4.2 highlighted that market-led governance has seen the imposition of a new level of hierarchy between practicing academics and the university's executive encompassing roles such as Pro-Vice Chancellor, Vice President and Director of Finance. This may impact the university's moral structural legitimacy by reducing the voice of front-line teaching and research staff in the strategic direction of the university (Shattock, 2013). Section 4.3 suggested that the traditional identity of the academic as a teacher and researcher has been impinged upon by the managerial need to meet commercial objectives. Section 4.6 highlighted the increased profile of senior management roles has led to excessive executive remuneration relative to the pay of pure teaching and research roles, further marginalising the academic. Similarly, the investment requirements of market-led university expansion have prioritised non-teaching expenditure over teaching (section 4.4). Finally, section 4.2 described how processes and procedures enabling the increase in managerialism across the university have imposed a bureaucratic and administrative burden on the individual academic. This includes the proliferation of performance management and quality assurance tasks, increased teaching administration (e.g. STaR) and pressure to take on non-teaching responsibilities. The overall effect of which is to constrain the time available for teaching and research, with implications for academic identity, morale and aspiration (Degn, 2018).

In parallel, the market led positioning of students as consumers has increased the pressure on academics to deliver positive student outcomes (Blackmore, 2009). The study highlighted that students are increasingly concerned how their university investment furthers their future career prospects. This exaggerates the importance of university outcomes over university learning and experience, marginalising further the role of the academic teacher. Section 4.5 identified the increasing influence of students with regard to course content and curriculum, including the introduction of trigger warnings for subject matter deemed sensitive. Finally, the study highlights increasing instances of students taking legal action to redress disappointing university outcomes. Though primarily impacting the university's cognitive legitimacy, such instances can only have a detrimental impact on an academic's confidence, integrity and identity.

In sum, the market-led university risks marginalising the role of the academic by prioritising management responsibilities over academic responsibilities and overindulging student need in

order to meet recruitment targets. Marginalised academics may endanger the moral structural legitimacy of the university as teaching and research responsibilities become dominated by quantifiable measures that can be gamed by staff focused on commercial outcomes. This diminishes the role academics play in the student's personal development journey. To redress the marginalisation of academics the university should look to emphasise (and give time to) the interpersonal and intrinsic aspects of scholarship. Also, ensuring bottom-up academic input and participation during the planning and implementation of significant change (across the university) may protect moral structural legitimacy (Khvatova and Dushina, 2017).

6.2 Closing Remarks

The final section of this doctoral research study details ethical considerations, the limitations of the study and potential areas for future research.

6.2.1 *Ethical Considerations*

Hammersley and Traianou (2012) identify three primary areas of ethical consideration for qualitative research: risk of harm; autonomy and consent; and thirdly, privacy, confidentiality and anonymity. As the research study was predominantly 'desk-based' and involved no active participation or input from any third party, ethical considerations beyond the impact on the researcher were minimal.

However, a potentially important ethical consideration of the study was the use of documentary data (newspaper articles) originally written with a specific objective and audience in mind, being reused in a different context for the research study where "it is not clear to what extent, if at all, informed consent has been given" (Briggs et al., 2012: 116). Consequentially, this made the researcher sensitive to issues of representation and copyright.

With regard to representation, care was taken when specifically naming a third party quoted or featured in any newspaper article utilised as data within the study. Although the use and analysis of such data is implied by the public forum environment of a newspaper archive, care should be taken to ensure the context remains consistent (Irwin, 2013). To minimise the possibility of the opinions of named individuals being taken out of context, care was taken to corroborate any views expressed utilising secondary sources. For example, the opinion expressed by Jo Johnson

(section 4.1.1.1) was corroborated by reference to an article for the Houses of Parliament in-house magazine. (The House, 13/3/2017) ²⁰²

With regard to copyright, judicious attention was paid to the 'General Terms and Conditions' underpinning the use of the LexusNexis Library newspaper archive. The University of Bristol School of Education's 'Research Ethics Procedure' was also fully reviewed. Discussions with the research supervisor and a peer of the researcher confirmed that minimal intervention was required with regard to research ethics. Completing field-orientated research ethics documentation (e.g. Ethicnet Field Research Form and the School of Education Ethics Form) was deemed unnecessary within the context of the research study.

6.2.2 Limitations of the Study and Recommendations for Future Research

As stated at the outset, the search for truth was never an objective for this research study. Instead, its aim was to capture the complexity and antecedents of legitimacy within an increasingly market-led university sector. As complexity is rarely fully defined, limitations in the research study were always likely to become evident. This section highlights three such limitations with associated proposals for future research.

Firstly, the findings presented, embodied in the EUL conceptual framework, would benefit from further external validation. Critical realism is founded upon three precepts: ontological realism; epistemological relativism; and thirdly, judgmental rationality (Bhaskar, 1978). Scope and logistics have limited the opportunity to further judgmental rationality, where an epistemic community can debate the findings of the study to validate their usefulness. Archer et al. argue:

“By comparatively evaluating existing arguments, we can arrive at reasoned, though provisional, judgments about what reality is objectively like, about what belongs to that reality and what does not.” (Archer et al., 2004: 2)

There is an opportunity for future research that brings together interested researchers employing different theoretical lenses to challenge the reality represented by the study.

Secondly, it has been recognised in section 3.5.1.2 of this study that the source of data (broadsheet newspaper articles) may not provide a fully equitable representation of all university

stakeholders. It is likely that broadsheet newspapers under-represent the voice of students, particularly prospective students, and are likely to over represent middle-class opinion.

Young people are more likely to be informed by social media, be more selective over source, and be better able to sanitise content against their own social context (Turner, 2015). A future area of research may wish to seek out the opinion of young people leveraging social media, to understand the antecedents of legitimacy for the university, where the young are increasingly viewed as consumers of university education rather than students of learning.

Finally, in trying to enact a proxy for university stakeholder opinion, the maturation of the news may be influential (Mitchell, 2012). Are old stories more influential because they are established in the mind of the reader, or does the vibrancy of the very latest news dominate? This study has focused on the frequency of news theme, rather than its age, as a proxy for public opinion.

By attempting to balance old news stories and the latest developments into a combined data set, the relative importance and influence of news story maturity on public opinion may be lost. A future area of research may wish to conduct a longitudinal study to understand the salience of themes regarding university legitimacy over time.

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